

Access Control Product Catalogue



Introduction & Profile



Introduction

Welcome to the 2004 edition of Bewator's Access Control Product Catalogue. We hope you find all the necessary information required to buy and install a wide variety of innovative access control solutions.

This guide should act as a useful tool for sourcing any of your access control requirements and prove an effective point of reference. If however, you need any further assistance please contact us by phone or visit our website.

Profile

Bewator is a leading international security group that develops and markets products and systems within the area of Access Security. Bewator has some 300 employees with group headquarters in Solna, Sweden and subsidiaries in Sweden, Norway, Denmark, Finland, Germany, U.K., Belgium, The Netherlands and Canada.

In 2002, Bewator celebrated its 25th year of security technology innovation. Whether you specify, integrate or install security systems, you need solutions that are flexible enough to meet your requirements of today, whilst allowing for systems to be expanded or upgraded at a later date.

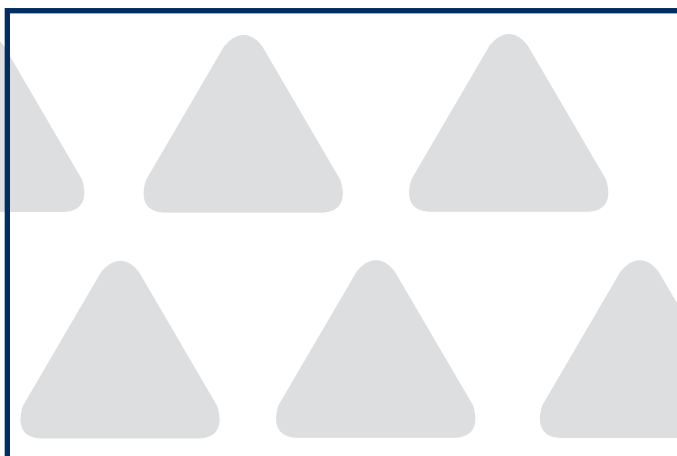
Bewator Access Control products are designed with your requirements in mind and will help you get the best from your Security System.

With innovative solutions, high quality products, and a strong commitment to customer service, Bewator is the partner of choice of Security professionals around the world. Bewator Ltd is part of the Bewator Group, a major player in the Security markets worldwide, with it's headquarters in Sweden.

The group focuses on 3 business areas: Access Control, Video Control and Parking Control. Development and manufacturing expertise in these areas puts Bewator Group at the cutting edge of modern security practice, by combining diverse technologies and systems to provide fully integrated security solutions.

Bewator's UK division is an active member of the British Security Industry Association and is ISO 9001 approved. All our products meet international standards, including FCC, R&TTE and CE. With Bewator solutions you can relax, safe in the knowledge that a 25-year pedigree of quality and excellence will provide you with practical, cost effective security solutions wherever you are in the world.

Bewator's major shareholder is EQT, founded by Investor AB, a holding company in the Wallenberg Group, Investor AB also has controlling interests in other leading Swedish international companies such as SAAB, Electrolux, SKF, Atlas Copco, Ericsson, ABB and AstraZeneca.



**Keeping close contact
at all times...**

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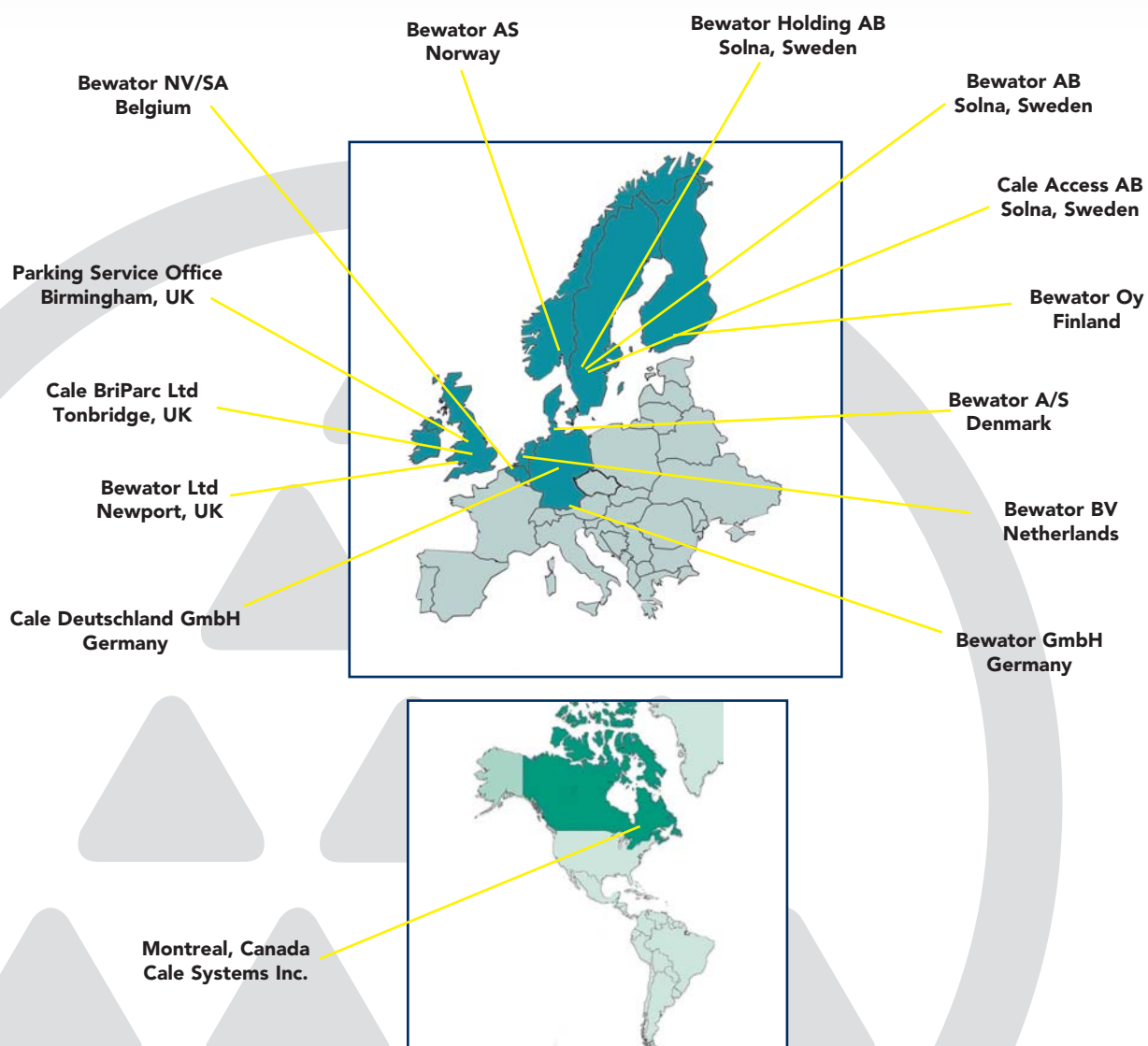
Why Bewator Access Control ?

Why choose Bewator Access Control ?

- Quality, innovative products and systems
- Patented Cotag® Hands-Free technology
- Simple to install products
- Established for over 25 years serving markets worldwide
- Excellent service and support capabilities
- Comprehensive training facilities
- Strong partnerships with Distributors and System Integrators
- Products and systems installed in major businesses and organisations around the world
- Comprehensive range of Access Control products and systems
- Forward thinking product development strategies
- Systems & solutions for any type of organisation and application

Global Presence

Bewator is represented in over 45 other countries around the world by local reseller networks.



Technical Services

Bewator Limited aims to be a product supplier with a difference. Standing out from its competitors, the company has an After Sales Services Division offering expert post-sales technical support and troubleshooting to assist Installers and Dealers during installation and configuration of all Bewator Limited branded products.

If your engineers need that bit of extra technical information then help is at hand. Call our technical support teams on **01633 821000**

Technical Support

Telephone support is a **FREE** service – please be aware that demand can be variable and we do have busy periods. On such occasions, leave your return contact details so that we can call you back as soon as we are able. We can also offer expert database analysis, this may involve a small cost.

Technical Training

Full technical training courses are available for all of the current Bewator Limited Access Control products and systems. Course length and structure varies, enabling you to pick individual day modules from our standard material. Call us on **01633 821000** or visit our website www.bewator.co.uk for details and prices.

Operator Training

Operator and end user training at our offices is free of charge and is booked on a first come first served basis. Dates and locations are not flexible so please ensure that your customers know where and when the courses have been booked for them.

Training Visits

Separate to our standard training courses, we can offer tailored training for your particular requirements. You will be asked to fill in a training visit request form and to supply a purchase order before the training visit takes place.

For training visits outside England and Wales it is possible to combine your needs with other resellers in your area. A longer more structured course can then be arranged.

On-Site Services

- System Commissioning
- Service calls
- End user training
- Problem diagnosis
- Tailored engineer training
- Just need a helping hand?



Our field service engineers are available at short notice, to compliment your own service staff. At a competitive daily rate, you will be able to sell not just equipment, but also premium levels of Service and Backup without the expense of employing your own high level engineers. This offers a significant saving to you and piece of mind for your customers!

5



BEWATOR

DELOCK
K42



Bewator produces the best selling range of Codelocks in the world. Security installers, locksmiths and electrical contractors on six continents make Bewator Codelocks their natural choice. Bewator Codelocks ensure that external and internal doors are opened and locked without resorting to keys which can easily be lost, copied or stolen.

By specifying Bewator Codelocks, commercial and private property is protected and personal safety is increased.



- Enhanced range
- Improved features
- Simple installation
- Rugged and reliable



Model No.

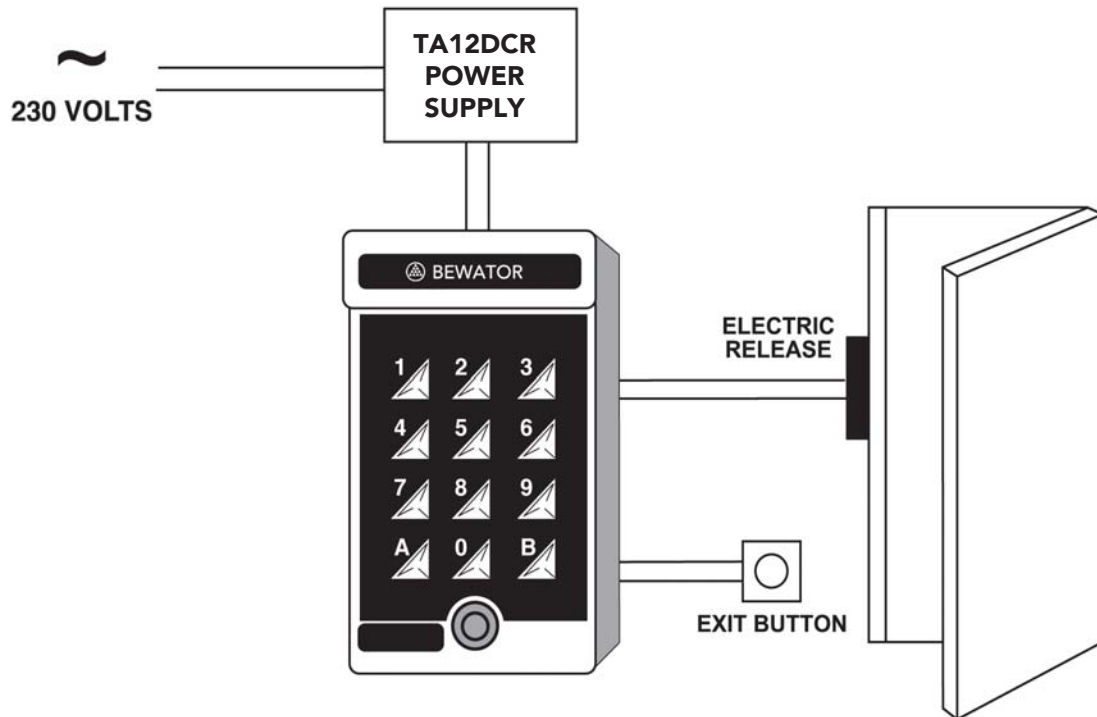
K-42**K-44 DUO****K-12****General Description**

The world's most popular Codelock, a modern design for outdoor use. Easy to use, simple to install, it comes with 2 codes, enabling one to be issued to caretakers and tradesmen whilst the other code is reserved for tenants or employees.

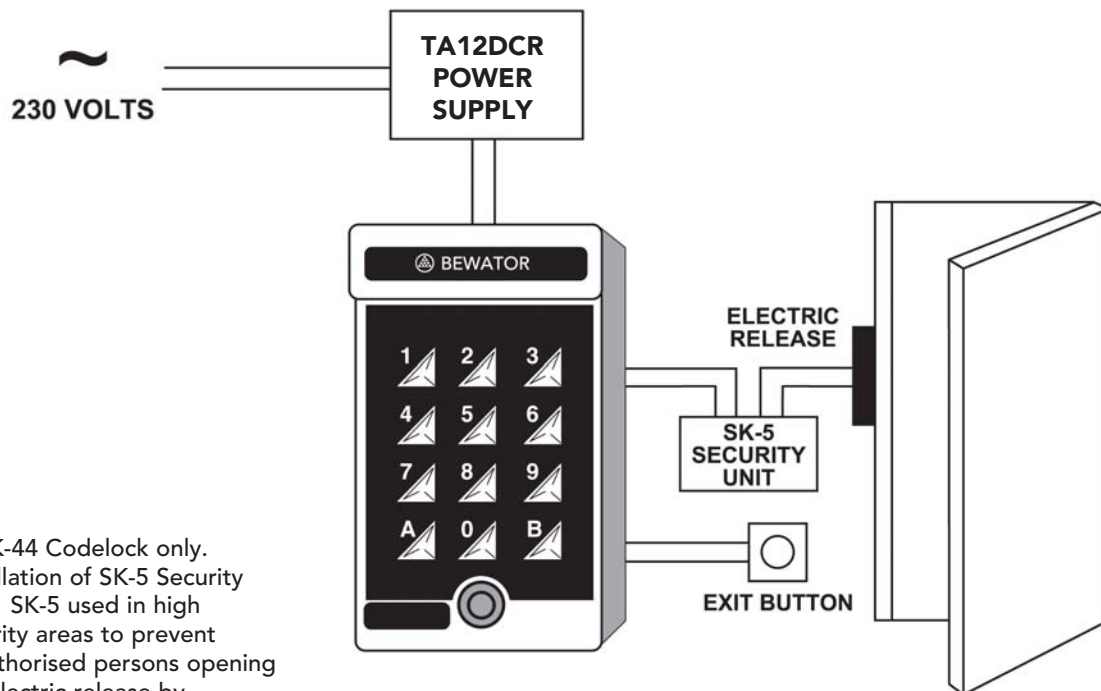
The top of the range Codelock, programmable via the keypad. Indoor or outdoor use, surface mount, back-lit keypad. It comes factory set with four codes but is expandable up to 30 codes. Incorporating a door bell feature and duress facility to signal a silent alarm to the security services should assistance be required.

Single door Codelock with Alarm Bypass incorporating Alarm Bypass functionality. Four code combinations, can also be set to advanced mode (30 codes, 20 x 4 and 10 x 6 digit). 2 relay outputs, door control and alarm control. Suitable for both indoor or outdoor use. Surface mount design. Back-lit keypad for low light conditions.

Length of Code	2-Four digit codes	20 Four-digit codes 10 Six-digit codes	20 Four-digit codes 10 Six-digit codes
Timing Code Disable	External contact for each code	External contacts for Group 1 & 2 codes	External contacts for Group 1 & 2 codes
Programming	Internal links	Via Keypad	Via Keypad
Outputs	One voltage-free contact	Two voltage-free contacts	Two voltage-free contacts
Duress	N / A	Add 1 to last number in code	Supported
Lock Relay Operating Time	01 - 30 seconds	01 - 99 seconds	01 - 99 seconds
Random Search Protection	Delay	3 incorrect codes disables further attempts	3 incorrect codes disables further attempts
Remote Door Release	External contact	External contact	External contact
Housing	Cast Metal, S/Steel buttons	Cast metal, S/Steel buttons	Cast metal, S/Steel buttons
Housing Security	Security lock (Stainless Steel)	Security lock (Stainless Steel)	Security lock (Stainless Steel)
Max Relay Loading	2 amp 30V d.c.	2 amp 30V d.c.	2amp 28V d.c
Power Supply	12-24V DC or 18-24V AC	10-35V DC or 8-24V AC	10-35V DC or 8-24V AC
Power Consumption	35mA	75mA	90mA
Dimensions (mm)	140H x 80W x 40D	140H x 80W x 40D	140H x 80W x 40D
Mounting Height (mm)	1200 - 1400	1200 - 1400	1200 - 1400



Typical standard installation
for: K-42 & K-44 & K12.



For K-44 Codelock only.
Installation of SK-5 Security
Unit. SK-5 used in high
security areas to prevent
unauthorised persons opening
the electric release by
connecting a battery across
the outgoing conductors.

Accessories

BB3	Flush mount kit for K-42, K-44 DUO and K-12 Codelocks
TA12DCR	12V DC regulated PSU at 1.5 amperes
SH-2	Rain Hood for Codelocks
MK-814	Remote override/exit button
WG2001-SG	Break glass unit. Green, surface mount. Single pole
SK-5	Security relay, prevents illegal entry from keypad (K-44 DUO only)

(For the full range of accessories, PSUs, door releases, spy proof covers, additional weather protection, Reader head cleaning kit and spare locks and keys please see page 54).

Applications

Codelocks are ideal for commercial and residential premises, such as apartment blocks. Allowing separate codes for differing users, e.g. employees, tenants or tradesmen, thereby restricting access to any unwanted visitors.



Codelock Kits & Accessories

A range of standard complete kits offering considerable savings from the normal retail price. For easy shelf stacking and recognition, all kits are supplied in strong plain white cardboard boxes with a wrap round label showing: Kit number, product, serial number and a list of components. Each kit is supplied with all necessary manuals. Kits carry a three year warranty from the date of purchase.

Codelock Kits - Cost Effective Solutions

(Please see the relevant product pages for more detailed specifications of the individual products).

Kit number	Controller	Power Supply	Ancillaries
Kit 1	K-42 Codelock	TA12 DCR	MK-814 Remote override/exit button
Kit 2	K-42 Codelock	TA12 DCR	209-12V door release (fail-safe)
Kit 3	K-42 Codelock	TA12 DCR	206-12V door release (fail-secure)
Kit 4	K-44 DUO Codelock	TA12 DCR	MK-814 Remote override/exit button
Kit 5	K-44 DUO Codelock	TA12 DCR	209-12V door release (fail-safe)
Kit 6	K-44 DUO Codelock	TA12 DCR	206-12V door release (fail-secure)

A range of standard kits designed for the security installer.

Accessories

BB3	Flush Mounting Kit for K-42, K-44 DUO and K-12 Codelocks
SH-2	Rain Hood for Codelocks
MK-814	Remote override/exit button
WG2001-SG	Break glass unit. Green, surface mount. Single pole
SK-5	Security relay, prevents illegal entry from keypad (K-44 DUO only)

(For the full range of accessories, PSUs, door releases, spy proof covers, additional weather protection, Reader head cleaning kit and spare locks and keys please see page 54).

Kit 1



Kit 5





Compact Cardreaders




Bewator Access Control Systems provide a secure method of protecting doors, whilst causing as little restriction as possible on freedom of movement. As part of this 'free-flowing' security, Bewator has produced a range of Compact Cardreaders. These are available in two different technologies, Magnetic Stripe or Proximity. Bewator's Compact Cardreaders are easy to install and provide a high level of security whilst maximising freedom of movement within a business environment.



- **Effective security whilst allowing freedom of movement**
- **Choose from Magnetic Stripe or Proximity technology**
- **Combined PIN number and card provides greater security and user flexibility**
- **Tough high quality robust construction**



Compact Cardreaders

Model No.	BC-402	BC-615	BC-615Prox
			
General Description	Magnetic stripe, card only reader , for use on one door. Surface mounted and suitable for internal or external use. Programmed by IB-402 shadow cards.	Compact, Magnetic Stripe and PIN reader for one internal or external door. Access registration, built in clock, printer output, programmed via keypad and fully upgradeable in Bewator Entro. Surface mount with back-lit keyboard and designed to be weatherproof to IP55	Compact, Proximity and PIN reader for one internal or external door. Access registration, built in clock, printer output, programmed via keypad and fully upgradeable in Bewator Entro. Surface mount with back-lit keyboard and designed to be weatherproof to IP55
Dimensions (mm)	89H x 34W x 34D	160H x 110W x 47D	160H x 110W x 47D
Temperature Range	-20°C to +60°C non-condensing	-35° to +50°C, at 90 % relative air humidity	-35° to +50°C, at 90 % relative air humidity
Power Supply	12-16V d.c. or a.c.	12-24 V AC/DC	12-35 V DC
Power Consumption	80mA	100mA	100mA
Card Capacity	200	1000	1000
Remote Door Release	External contact	External contact	External contact
Housing	Zinc casting lacquered metallic paint finish	Zinc casting lacquered metallic paint finish	Zinc casting lacquered metallic paint finish
Security Levels	N/A	Open, common code, card,card + pin, no access, toggle	Open, common code, card,card + pin, no access, toggle
Reading Range	N/A	N/A	Active cards: approx. 10 cm. Passive cards: approx. 3 cm.
Lock	N/A	Security lock	Security lock
Time Zones	N/A	15 time zones grouped into up to 15 time schedules	15 time zones grouped into up to 15 time schedules
Duress	N/A	YES	YES
Tamper Output	N/A	YES	YES

Cards & Tags, Accessories & Applications

Cards & Tags

IB-1	Magnetic Stripe Card, Factory encoded, supplied sequentially
CR80M	Blank Magnetic Stripe Card, Factory encoded, supplied sequentially, Suitable for Photo ID
IB-402	Master Card & 200 Shadow card pack for BC-402, Uses standard IB-1 or CR80M for user cards
IB-968	Passive encoded clamshell card
IB-961	Passive encoded keyring tag
IB-958	Passive encoded ISO laminated card, suitable for Photo ID
IB-958M	Passive encoded ISO laminated card with magstripe, suitable for Photo ID
IB-928	Active Clamshell encoded card
IB-928***	Active encoded coloured clamshell card, available in Blue, Clear, Purple, Red or Green
IB-911	Active encoded keyring tag

(For a full description of Bewator's Cards & Tags and Read Ranges please see page 42).

Accessories

MOUNTING	BC-402 Cardreader mounting plate for uneven surfaces
BB4	Flush mount kit for BC-615 Compact Cardreaders
SH-4	Rain Hood for BC-615 Compact Cardreaders
CR1	Reader Interface for BC-615 Compact Cardreader when being networked with Bewator Entro (One per Reader)
TA12DCR	12V DC regulated PSU at 1.5 amperes
MK-814	Remote override/exit button
WG2001-SG	Break glass unit. Green, surface mount. Single pole

(For the full range of accessories, PSUs, door releases, spy proof covers, additional weather protection, Reader head cleaning kit and spare locks and keys please see page 54).

Applications

Bewator's Compact Cardreaders provide a high level of security whilst maximising freedom of movement within a business environment.



Compact Cardreader Kits

A range of standard complete kits offering considerable savings from the normal retail price. For easy shelf stacking and recognition, all kits are supplied in strong plain white cardboard boxes with a wrap round label showing: Kit number, product, serial number and a list of components. Each kit is supplied with all necessary manuals.

Cardreader Kits - Cost Effective Solutions

(Please see the relevant product pages for more detailed specifications of the individual products).

Kit number	Controller	Power Supply	Ancillaries
Kit 7	BC-402 Compact Cardreader	TA12 DCR	IB-402 card pack+50 x IB-I cards
Kit 10	BC-615 Compact Cardreader	TA12 DCR	50 x IB-I cards
Kit 15	BC-615Prox Compact Cardreader	TA12 DCR	50x IB-968 cards

A range of standard kits designed for the security installer.

Cards & Tags

IB-1	Magnetic Stripe Card, Factory encoded, supplied sequentially
CR80M	Blank Magnetic Stripe Card, Factory encoded, supplied sequentially. Suitable for Photo ID
IB-402	Master Card & 200 Shadow card pack for BC-402, Uses standard IB-1 or CR80M for user cards
IB-968	Passive encoded clamshell card
IB-961	Passive encoded keyring tag
IB-958	Passive encoded ISO laminated card, suitable for Photo ID
IB-958M	Passive encoded ISO laminated card with magstripe, suitable for Photo ID
IB-928	Active Clamshell encoded card
IB-928***	Active encoded coloured clamshell card, available in Blue, Clear, Purple, Red or Green
IB-911	Active encoded keyring tag

(For a full description of Bewator's Cards & Tags and Read Ranges please see page 42).

Accessories

MOUNTING	BC-402 Cardreader mounting plate for uneven surfaces
BB4	Flush Mounting Kit for BC-615 Compact Cardreaders
SH-4	Rain Hood for BC-615 Compact Cardreaders
CR1	Reader Interface for BC-615 Compact Cardreader when being networked with Bewator Entro (One per Reader)
MK-814	Remote override/exit button
WG2001-SG	Break glass unit. Green, surface mount. Single pole

(For the full range of accessories, PSUs, door releases, spy proof covers, additional weather protection, Reader head cleaning kit and spare locks and keys please see page 54).

Single Door Standalone Controller

Bewator's Single Door Standalone Controller can be used with the full suite of Bewator's Readers, be it Hands-Free, Proximity or Magstripe. These controllers have memory storage for up to 8000 users, 15 Time Zones and 15 Time Schedules and can also be used for such functions as a bank lobby where a common card is used or Automatic Vehicle Identification (AVI).



- **Easy to install**
- **Greater security with separate controller and reader configuration**
- **Can use the full range of Bewator Readers**
- **Low maintenance**
- **Memory for up to 8000 users**



Model No.

BC-640-KP

General Description **Programmable Single Door Standalone Controller with integral keypad** for programming, designed for split mounting at one door. Connects to a Hands-Free, Proximity or Magnetic Stripe Card Reader. Alarm by-pass, anti-pass back and day/night lock possible. Calendar clock for automatic change of security levels. Registration and event printing. Features common card functionality allowing use in bank lobbies.

Dimensions (mm)	140H x 200W x 60D
Temperature Range	-35°C to +50°C , at 90% relative air humidity
Power Supply	8-28V AC, 10-40V DC
Power Consumption	100mA in standby, 180mA with all relays activated
Card Capacity	8000
Remote Door Release	External contact
Housing	Wall mounted housing with security lock
Security Levels	Open, common code, card, card + pin, no access
Lock	Security Lock
Time Zones	15
Door Capacity	1
Tamper Output	Tamperswitch for internal control

Model No.	PR500-AB	SP500-AB	PM500-AB	HD500-2-AB
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General Description

Proximity Reader
Mullion Mount, stone colour, clear unambiguous status LEDs and integral sounder. Up to 30cm read range with Active cards & tags, 10cm with Passive cards & tags. Suitable for internal or external use

Switch Plate Proximity Reader.
Designed to utilise pre-installed back-boxes for ease of installation. ABS housing, up to 30cm read range with Active cards & Tags, 10cm with Passive cards & tags. Suitable for internal or external use

Panel Mount Proximity Reader.
Designed for fitment into 3rd panels such as Door Entry Phones. Impact resistant polycarbonate housing. Up to 28cm read range with Active cards and tags, 10cm with Passive cards & tags. Suitable for internal or external use

Heavy Duty Proximity Reader.
Solid construction in stainless steel and polycarbonate, ideal for use in locations vulnerable to physical attack. Tamperproof fixings. Up to 30cm read range with Active cards & tags, 10cm with Passive cards & tags. Suitable for internal or external use

Model No.	BC-43Prox	HF500-Entro	BC-5511	BC-5270
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General Description

Proximity Reader with keypad.
Integral Proximity Cardreader with PINpad. Up to 10cm read range with Active cards & tags, 3cm with Passive cards & tags. Suitable for internal or external use.

Hands-Free Reader Features Cotag® Active Technology.
Modern stylish design, stone colour. Up to 1 metre read range with Active cards & tags, 30cm with Passive cards & tags. Internal use only

Hands-Free Reader Pack.
As above, but allows for external fitting using a HF100 Reading Head (external use) and a BC-5311 Interface (internal use only)

Integrated loop Reader Pack Features Cotag® Technology.
Provides, by a buried loop in the ground or round a door, a read range of up to 2 metres. Use only Active cards & tags. Internal use only

Model No.

BC-5516**BC-16****BC-43****General Description****Loop Reader Pack**

Allows external fitting using a BC-270 Loop Coupler (external use) and a BC-5311 Interface (internal use only). Suitable for Automatic Vehicle Identification (AVI)

Card-only Reader

Magnetic Stripe Card-only Reader. For uneven surfaces use the mounting plate. Suitable for external or internal use

Magnetic Stripe Card

Reader with keypad. Magnetic Stripe Card and keypad Reader. Suitable for external or internal use.

Cards and Tags Accessories & Applications

Cards & Tags

IB-968	Passive encoded clamshell card
IB-961	Passive encoded keyring tag
IB-958	Passive encoded ISO laminated card, suitable for Photo ID
IB-958M	Passive encoded ISO laminated card with magstripe, suitable for Photo ID
IB-928	Active Clamshell encoded card
IB-928***	Active encoded coloured clamshell card, available in Blue, Clear, Purple, Red or Green
IB-911	Active encoded keyring tag
IB-970	Active encoded vehicle tag (attaches to underside of vehicle)
IB-1	Magnetic Stripe Card, Factory encoded, supplied sequentially
CR80M	Blank Magnetic Stripe Card, Factory encoded, supplied sequentially, Suitable for Photo ID

(For a full description of Bewator's Cards & Tags and Read Ranges please see page 42).

Accessories

MULTI-BOX MOUNTING	Used to connect two Readers to the input of a BC-640-KP
BB4	BC-402 Cardreader mounting plate for uneven surfaces
SH-4	Flush mount kit for BC-43 Cardreaders
TA12DCR	Rain Hood for BC-43 Cardreaders
MK-814	12V DC regulated PSU at 1.5 amperes
WG2001-SG	Remote override/exit button
	Break glass unit. Green, surface mount. Single pole

(For the full range of accessories, PSUs, door releases, spy proof covers, additional weather protection, Reader head cleaning kit and spare locks and keys please see page 54).

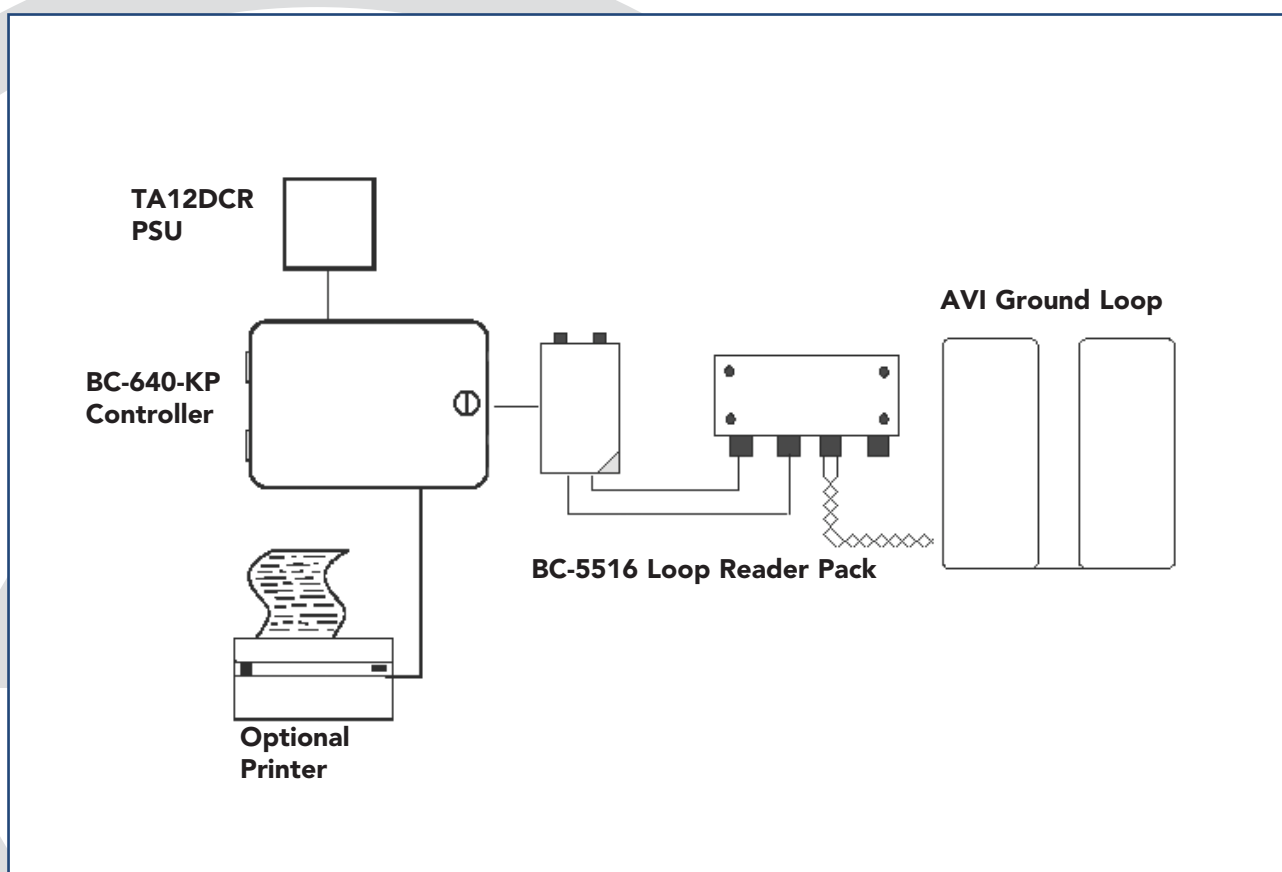
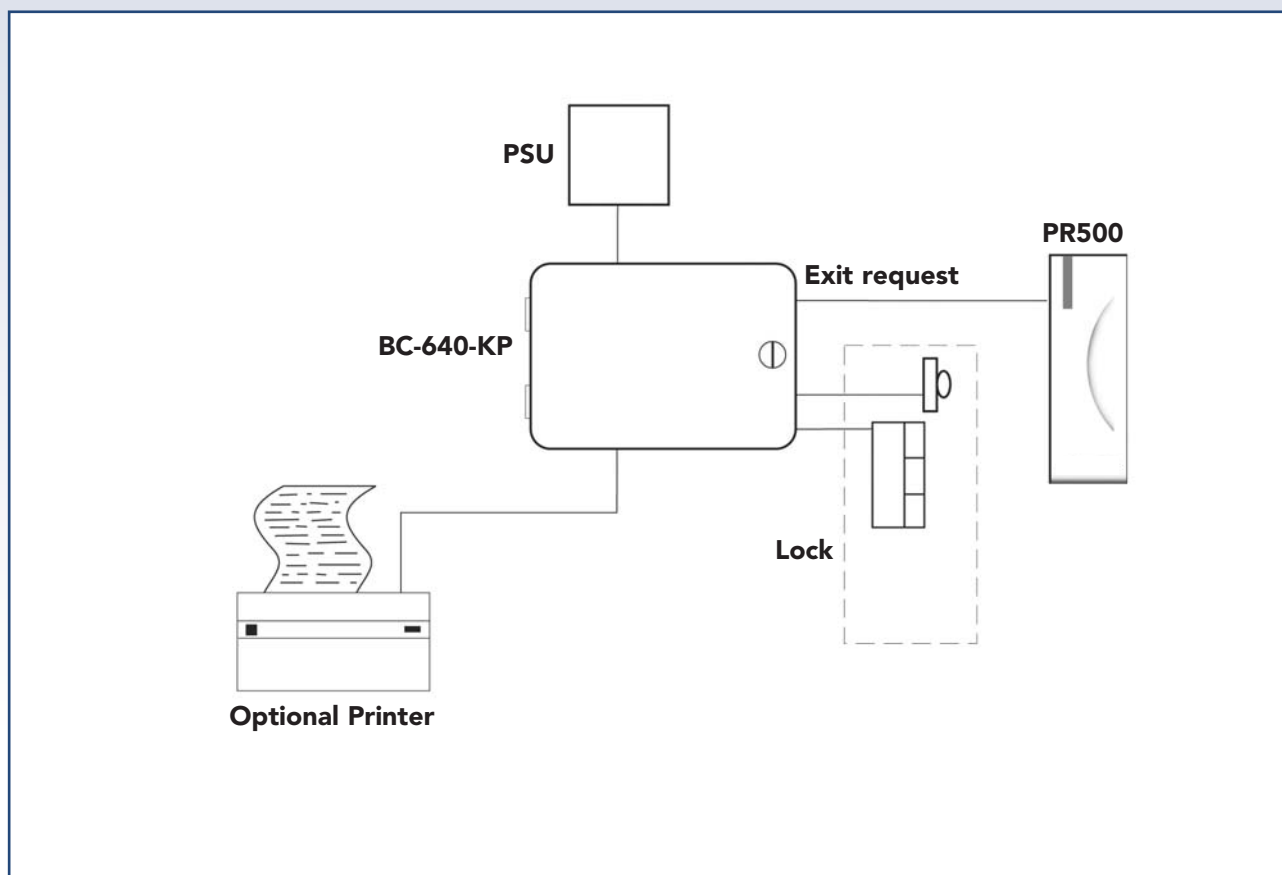
Applications

The Single Door Standalone Controller when used in conjunction with Bewator's range of Readers offer a higher level of security and has a multitude of applications. One such application is in Bank Lobbies. By using the unique numbers that prefix each individual bank's cards access can be granted to only their customers.

Another application is Automatic Vehicle Identification (AVI). RFID tagging of vehicles creates particular technical challenges due to physical vibration, stone damage and especially electrical noise caused by the ignition system and electronic equipment. Bewator's Patented Cotag® Technology provides a solution for use in car parking and fleet management applications, overcoming these problems and provides a fast reliable solution using Bewator's BC-640-KP Single Door Standalone Controller, BC-5516 Loop Reader Pack and IB-970 Vehicle Tags.



Schematics



The award winning Bewator Entro system is suitable for commercial and industrial premises, institutions such as hospitals, or indeed any establishment requiring an effective Access Security Solution. Simplicity is one of Entro's most important qualities.



- **PC Based modular access control system**
- **Can cater for up to 512 doors and 12,000 people**
- **Simple system configuration**
- **Improved operating flexibility**
- **Extensive range of Reading Solutions and card options**
- **Integral Reservation Function**



System Introduction

Bewator Entro is an access control system developed for companies and organisations requiring a high level of security whilst at the same time being user-friendly and simple to manage. By avoiding the insecurity of keys which often get misplaced, Bewator Entro instead enables authorised individuals to use a card or a token to gain access into protected areas. Assigning who can come in, where they can go and at which times is easily managed from a standard PC running the Entro software. Should an individual's card be lost or stolen, it can easily and quickly be disabled preventing its unauthorised use to gain entry. In addition, Bewator Entro can also be used in conjunction with an intruder alarm system, thus simplifying and streamlining 'keyholder' arming and disarming procedures.

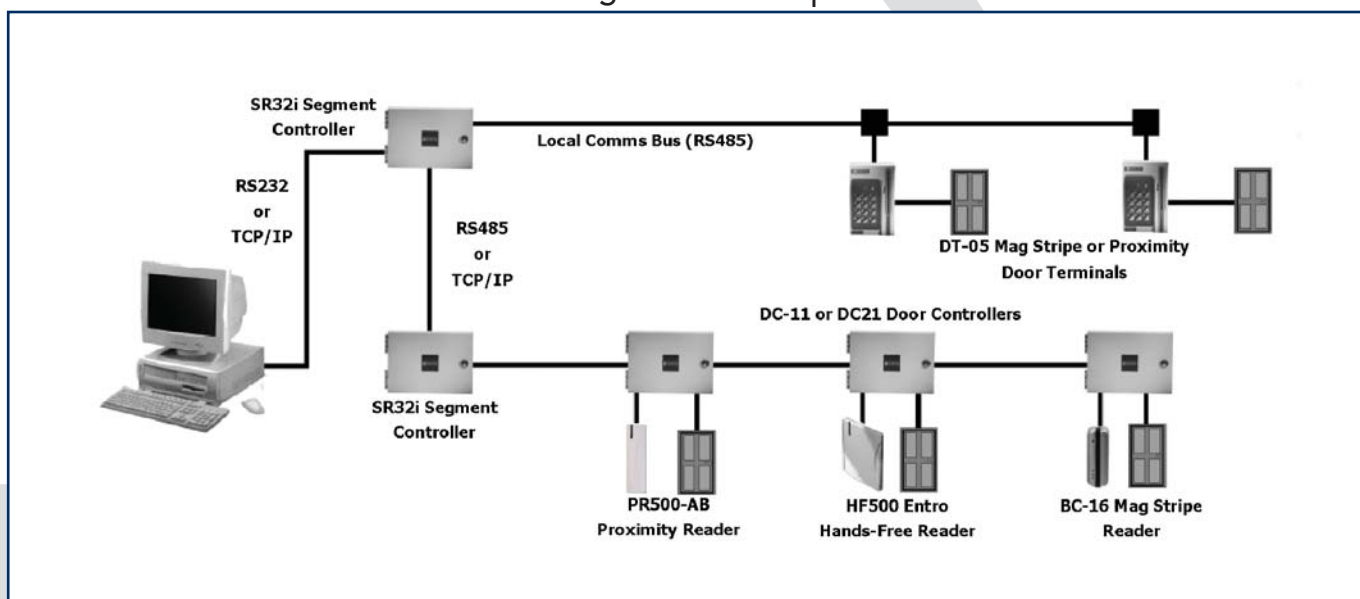
The system uses distributed intelligence via SR32i Segment Controllers, which hold all the necessary information for system operation, whilst the PC is only used for programming and monitoring. There are five Segment Controllers available - 2, 4, 8, 16 and 32 - allowing costs to be optimised for different system sizes. Up to sixteen Segment Controllers can be connected to a bus.

The DC-11 or DC-21 Door Controllers are connected to the Segment Controllers. The type chosen depends on the functions required for each door in question. The Door Controllers are in turn connected to the Reader at the door. The system can utilise the complete range of Bewator Readers, from Proximity, Hands-Free, Magnetic Stripe to Smart Cards.

Bewator Entro also supports connection via TCP/IP over a LAN or WAN and also features an Integral Reservation Booking Function, which allows certain people or groups to reserve access to premises at particular times. This is ideal for conference rooms, squash courts and other leisure facilities. Reservations are made via the Internet or from Bewator's InfoPoint IP810 touch screen reservation terminal next to the location in question.

Despite being able to cater for up to 512 doors, 12,000 card holders, 160 time schedules, 240 access groups and 128 zones, Entro 4 is one of the simplest systems to install and using Bewator's Starter Packs and Reader Packs, it is now more cost effective and easier to specify.

Configuration Example





General Description	<p>A user-friendly Windows based software for use with Bewator's Entro System hardware.</p> <p>Connections can either be direct via RS232, dial up via modem or over a LAN or WAN via TCP/IP</p> <p>Standard features include global anti-passback, roll call, door monitoring, lift control option, alarm bypass and control functions</p>
Basic PC Requirements	<p>Pentium II 266MHz</p> <p>64 Mb RAM</p> <p>Min. 20 MB free space on hard disc</p> <p>CD-ROM drive</p> <p>Min. VGA monitor</p> <p>Local Area Network connection (Ethernet 10 Mbit)</p> <p>Serial port for SR32i/modem</p> <p>Parallel printer port</p> <p>Windows 98/2000/XP or Windows NT version 4.0 or later</p> <p>Communication port with UART 16C550 (or better)</p>
Basic Network Requirements	<p>Twisted-pair Ethernet 10 MBit (10 Base-T)</p> <p>Static/permanent IP-address for SR32i</p> <p>Access to SNTP Server when using TCP/IP connectivity</p> <p>Permanent Internet connection of SR32i when Internet is used</p> <p>DNS is not used</p>
System Features	<p>10 System administrators in 3 levels plus dedicated Installer Screen</p> <p>Compatible with Windows 98/2000/XP or Windows NT version 4.0</p> <p>Supplied on CD complete with documentation</p>
System Capacity	<p>512 doors</p> <p>12,000 cardholders</p> <p>160 time schedules</p> <p>240 access groups</p> <p>128 zones (alarm, anti-passback, roll call and entrance limitations)</p> <p>7 half days, 14 holidays and 4 holiday periods in each time schedule</p> <p>Up to 1000 sub-systems can be controlled</p>
Integral Reservation Function Capacity	<p>An Integral Reservation Function allowing certain people or groups to reserve access to premises at particular times. Ideal for conference rooms, squash courts, and other leisure facilities.</p> <p>Reservations are made via the Internet or from the InfoPoint IP810 Touch Screen Terminal next to the location in question. Requires use of CF8 SR32i Memory Card</p>

Entro 4 Packs - Cost Effective Solutions

A range of standard Entro 4 Starter packs and Reader Packs offering considerable savings from the normal recommended retail prices.

Starter Packs

ENTSTPK2R

Two Reader Proximity Starter Pack. Consists of Entro 4 software and Support Pack, 1 x SR32i-4 Segment Controller, 2 x PR500-AB Proximity Readers and 2 x DC-11 Door Controllers



ENTSTPK4R

Four Reader Proximity Starter Pack. Consists of Entro 4 software and Support Pack, 1 x SR32i-4 Segment Controller, 4 x PR500-AB Proximity Readers and 4 x DC-11 Door Controllers



Reader Packs

ENTPRXPK

Proximity Reader Pack. Consists of 1 x PR500-AB Proximity Reader and 1 x DC-11 Door Controller



ENTHFPK

Hands-Free Reader Pack. Consists of 1 x HF500-Entro Hands-Free Reader (internal use only) and 1 x DC-11 Door Controller



ENTMAGPK

Magnetic Stripe Reader Pack. Consists of 1 x BC-16 Card-only Reader and 1 x DC-11 Door Controller



PC Support Packs

Entro 4 PC Support Pack. Includes Entro version 4 software and manuals. Compatible with Windows 98/2000/XP and NT version 4 or later



Segment Controllers

Model No.

SR32i-2, 4, 8, 16, 32


General Description	Entro Segment Controller. There are five variants – SR32i-2, SR32i-4, SR32i-8, SR32i-16 and SR32i-32. Requires Entro software version 4.1. PLEASE NOTE that the old SR32 Segment Controllers will only work on previous versions of Entro and are not compatible with Entro version 4. It is not possible to mix SR32 and SR32i Segment Controller on the same site/system. For extensions to installations using previous versions of Entro please consult our Customer Support team for pricing and availability.
Dimensions (mm)	140H x 200W x 60D
Temperature Range	0° to +50°C
Weatherproof	Internal use only
Power Supply	8-40V DC or 8-30V AC
Power Consumption	250mA
Housing	Glass reinforced polycarbonate, tamper protected, lockable housing for wall mounting
Door Capacity	2, 4, 8, 16, 32 - Dependant on which SR32i is used i.e. SR32i-2, SR32i-4, SR32i-8, SR32i-16, SR32i-32
Interfaces	10 Base-T 10 Mbit connection for Ethernet. Expansion slot for CF8 memory card (flash)
RS232 Interface	RS232 for PC, modem or printer - max 25 metres
RS485 Interface	RS485 for connection of up to 16 Segment Controllers and connection of doors
Cable Length	Maximum 1000 metres
Memory Backup	10 years
Tamper Protection	Tamper switch with internal alarm
Inputs	Power supply failure warning signal (normally closed)
Outputs	Common alarm (impulse 2 seconds)

Model No.

DC-11**DC-21**

General Description	Door Controller for 1 door with 1 Reader	Advanced Door Controller for 1 door with 1 Reader. Features include 30 priority group cards, alarm by-pass control and lock monitoring
Dimensions (mm)	140H x 200W x 60D	140H x 200W x 60D
Temperature Range	-35° to +50°C	-35° to +50°C
Weatherproof	Internal use only	Internal use only
Power Supply	8-40V DC or 8-30V AC	8-40V DC or 8-30V AC
Power Consumption	120Ma max	120Ma max
Housing	Glass reinforced polycarbonate, tamper protected, lockable housing for wall mounting	Glass reinforced polycarbonate, tamper protected, lockable housing for wall mounting
Remote Door Release (Egress)	External contact	External contact
Interfaces	RS485 connection to SR32i Segment Controller. BC link or clock/data to reader	RS485 connection to SR32i Segment Controller. BC link or clock/data to reader
Outputs	Voltage-free relay contact, max2A, 30V	Voltage-free relay contact, max2A, 30V. Additional 3 x voltage-free relays for alarm bypass, door held warning and alert relay

Model No.	PR500-AB	SP500-AB	PM500-AB	HD500-2-AB
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General Description

Proximity Reader
Mullion Mount, stone colour, clear unambiguous status LEDs and integral sounder. Up to 30cm read range with Active cards & tags, 10cm with Passive cards & tags. Suitable for internal or external use

Switch Plate Proximity Reader.
Designed to utilise pre-installed back-boxes for ease of installation. ABS housing, up to 30cm read range with Active cards & Tags, 10cm with Passive cards & tags. Suitable for internal or external use

Panel Mount Proximity Reader.
Designed for fitment into 3rd panels such as Door Entry Phones. Impact resistant polycarbonate housing. Up to 28cm read range with Active cards and tags, 10cm with Passive cards & tags. Suitable for internal or external use

Heavy Duty Proximity Reader.
Solid construction in stainless steel and polycarbonate, ideal for use in locations vulnerable to physical attack. Tamperproof fixings. Up to 30cm read range with Active cards & tags, 10cm with Passive cards & tags. Suitable for internal or external use

Model No.	BC-43Prox	HF500-Entro	BC-5511	BC-5270
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General Description

Proximity Reader with keypad.
Integral Proximity Cardreader with PINpad. Up to 10cm read range with Active cards & tags, 3cm with Passive cards & tags. Suitable for internal or external use

Hands-Free Reader Features Cotag® Active Technology.
Modern stylish design, stone colour. Up to 1 metre read range with Active cards & tags, 30cm with Passive cards & tags. Internal use only

Hands-Free Reader Pack.
As above, but allows for external fitting using a HF100 Reading Head (external use) and a BC-5311 Interface (internal use only)

Integrated loop Reader Pack Features Cotag® Technology.
Provides, by a buried loop in the ground or round a door, a read range of up to 2 metres. Use only Active cards & tags. Internal use only

Model No.	BC-5516	BC-16	BC-43	M-43
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**General Description****Loop Reader Pack**

Allows external fitting using a BC-270 Loop Coupler (external use) and a BC-5311 Interface (internal use only). Suitable for automatic Vehicle Identification (AVI)

Card-only Reader.

Magnetic Stripe Card-only Reader. For uneven surfaces use the mounting plate. Suitable for external or internal use

Magnetic Stripe Card Reader with keypad.

Magnetic Stripe Card and keypad Reader. Suitable for external or internal use

Keypad only.

May also be used in parallel with Proximity or Hands-Free Readers

Model No.	SM-501	SM-501K	DT-05	DT-05Prox
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**General Description****Smart Card Reader.**

Contactless Mifare® Smart Card Reader. Jumper selectable Operating parameters and interface protocols. Suitable for internal use only

Smart Card Reader.

Contactless Mifare® Smart Card Reader with keypad. Jumper selectable operating parameters and interface protocols. Suitable for internal use only

Magnetic Cardreader

with keypad for direct connection to any SR32i Segment Controller, without the use of a Door Controller. Suitable for doors not requiring high security

Proximity Reader

with keypad for direct connection to any SR32i Segment Controller, without the use of a Door Controller. Suitable for doors not requiring high security

(For a full description of Bewator's Cards & Tags and Read Ranges please see page 42).

Cards & Tags Accessories & Applications

Cards & Tags

IB-968	Passive encoded clamshell card
IB-961	Passive encoded keyring tag
IB-958	Passive encoded ISO laminated card, suitable for Photo ID
IB-958M	Passive encoded ISO laminated card with magstripe, suitable for Photo ID
IB-928	Active clamshell encoded card
IB-928***	Active encoded coloured clamshell card, available in Blue, Clear, Purple, Red or Green
IB-911	Active encoded keyring tag
IB-970	Active encoded vehicle tag (attaches to underside of vehicle)
IB-1	Magnetic Stripe Card. Factory encoded, supplied sequentially
CR80M	Blank Magnetic Stripe Card. Factory encoded, supplied sequentially. Suitable for Photo ID
SC558	Mifare® Smart Card

(For a full description of Bewator's Cards & Tags and Read Ranges please see page 42).

Accessories

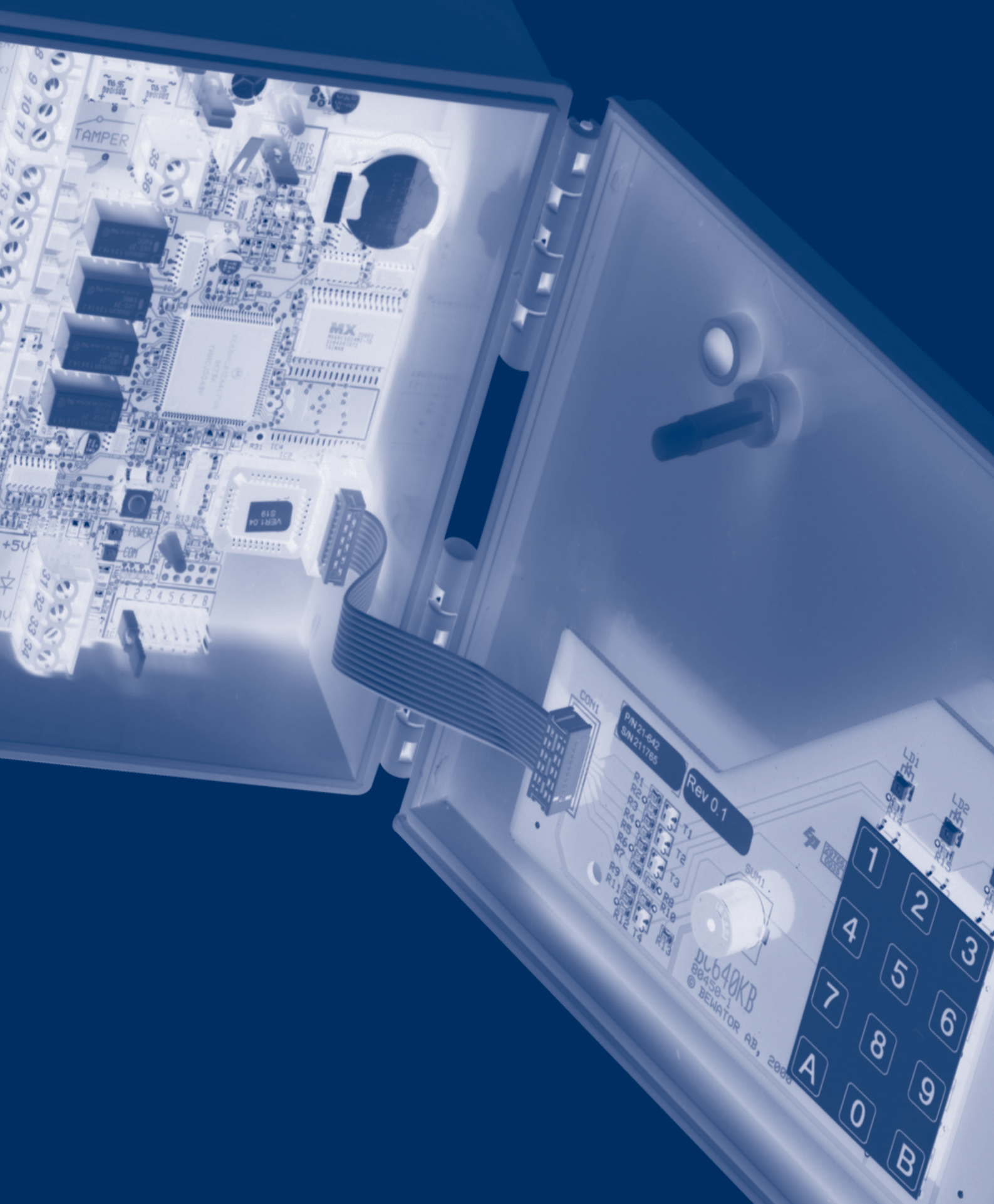
DC01	Door Interface for controlling doors without a reader. Used for general control like timing functions or door monitoring
IOR6	Input/Output Unit, Four inputs and six outputs. Intended for use in elevator control applications such as machine control
IP810	Touch Screen Reservation Terminal for Integrated Reservation Function, TCP/IP based, colour screen, keypad and integral Proximity Reader
MULTI-BOX	Used to connect two Readers to the input of a DC-11 or DC-21 (In and Out Readers - no antipassback)
MOUNTING	BC-16 Cardreader mounting plate for uneven surfaces
BB4	Flush Mounting Kit for BC-43 & DT-05 Cardreaders
BB7	Flush Mounting Kit for InfoPoint Reservation Terminal
SH-4	Rain Hood for BC-43 & DT-05 Cardreaders
MK-814	Remote override/exit button
WG2001-SG	Break glass unit. Green, surface mount. Single pole
CF8	SR32i Memory Card for Integral Reservation Function, inserted in dedicated slot in SR32i Segment Controller
BA212	12V battery backed PSU at 5 amperes. Battery not included
MODEM-DU-HST	Modem for PC connection (host)
MODEM-DU-REM	Modem for SR32i Segment Controller connection (remote)

(For the full range of accessories, PSUs, door releases, spy proof covers, additional weather protection, Reader head cleaning kit and spare locks and keys please see page 54).

Applications

Bewator's Entro is a system developed for companies and organisations, institutions such as hospitals, or any establishment requiring an effective access security solution.





Bewator's Cotag® Technology Readers are designed to work with your access control system to deliver superior reading solutions. The range comprises Proximity Readers, Hands-Free, Magnetic Stripe and Smart Card Readers to suit all environments and building specifications. When used with Active Technology cards and tags, Bewator Readers provide unrivalled reading range to speed flow of personnel whilst securing even the busiest of sites.



- **Modern, stylish designs**
- **Bewator's unique patented Cotag® Hands-Free Active Technology**
- **Extensive range of card reading options**
- **Customised Covers with styles to complement any building interior**



Reader Technology

Patented Cotag® Reading Technology

Real Hands-Free is based upon Active Tag Technology where an onboard long-life lithium battery enhances the output signal from the tag to the reader. The key advantage using Active Technology is the significant increase in range from which the tag can be successfully interrogated by the reader, this being typically between two to three times greater compared to that of common place passive cards.

Active cards and tags use low frequency magnetic signals, which have the key advantage of being able to read through non-magnetic materials with little or no reduction in range. This allows tags to be interrogated without the need to remove them from pockets or handbags thus giving the user unparalleled freedom and convenience without compromising site security. Active technology can overcome problems associated with vandalism simply by mounting the Reader within walls or mounted 'safe-side' within glass-fronted lobby/reception areas.

There are two types of Reader available which fully embrace the true user benefits of real Hands-Free for access control applications. The unobtrusive wall-mounted **HF500-Entro Hands-Free Reader** is designed for quick and easy installation and the **BC-5270 Loop Technology Reader** which provides even greater reading range and also allows for its antenna to be suitably hidden within the door frames or walls thus providing the customer a clean, minimalist, aesthetic pleasing solution.

Passive Proximity Technology is based upon the same principles as active **Real Hands-Free**, but without the onboard battery, this results in a significantly shorter reading range as it's output power is derived solely from the magnetic fields generated by the Reader. Passive Technology offers a cost effective access solution for many systems except those requiring Loop Technology Readers.

All Bewator's Cotag® Active and Passive Technology cards and tags can be mixed together on any Bewator system, allowing the customer to issue the most suitable technology card or tag to that user depending upon their requirements. This is particularly useful for facilitating disabled staff requirements and also for clean room operations where garments typically only have pockets on the inside.



Mifare® Contactless Smart Card Readers

With an increasing demand for a multi-application card solution, Bewator is teamed together with the world's largest Smart Card Technology company Gemplus® to bring reliable and robust Mifare® Smart Card Readers for use in access control systems. These Readers utilise the unique chip serial number found in every Mifare® Smart Card and uses that number as the individual's identifier within the access system.

Automatic Vehicle Identification (AVI)

RFID tagging of vehicles creates particular technical challenges due to the high levels of electrical background noise caused by the ignition system and physical vibration/stone impacts associated with normal road going conditions. Bewator's Cotag® Active Technology AVI addresses these and provides a real world solution for use in car parking and fleet management applications, giving fast and reliable reading of tags fitted to the underside of vehicles. The IB-970 Vehicle tag is specifically designed to withstand harsh environments, being not only certified for use with the Ministry of Defence military vehicles but also passing strict EMC approvals as required by the Home Office's VIDG Specification 5 for use by the Police & Fire Services.

Model No.	PR500-AB	SP500-AB	PM500-AB
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General Description	High Performance Proximity Reader. Designed to suit door architraves and compliment all working environments. Suitable for both internal and external installations. Compatible with all Cotag® Technology Active and Passive cards & tags.	High Performance Switch Plate Proximity Reader. Designed to fit most single gang back-boxes and compliment all working environments. Suitable for both internal and external installations. Compatible with all Cotag® Technology Active and Passive cards & tags	High Performance Panel Mount Proximity Reader. Designed to fit most remote 3rd party panels, such as Door Entry Phones. Supplied complete with a custom machined perspex front panel for increased aesthetic appeal. Suitable for both internal and external installations
Product Spec.	Transmit frequency 132kHz, Receive frequency 66kHz. 64 data bits, read time typically 400ms. 3 separate LEDs & onboard Sounder (internal/external control). ABS Base, Clip on ABS Front Cover	Transmit frequency 132kHz, Receive frequency 66kHz. 64 data bits, read time typically 400ms. 3 separate LEDs & onboard Sounder (configurable internal/external control). ABS Base with housing fully encapsulated electronics, Clip on ABS Front Cover	Transmit frequency 132kHz, Receive frequency 66kHz. 64 data bits, read time typically 400ms. 3 separate LEDs & onboard Sounder (configurable internal/external control). High impact polycarbonate outer casing, fully potted electronics
Dimensions (mm)	143H x 40W x 18.5D	86H x 86W x 14D	68H x 73W x 13.5D
Temperature Range	-30 to +50°C	-30 to +50°C	-30 to +50°C
Environmental	IP55	IP55	IP55
Power Supply	10.6V to 32V DC	10.6V to 32V DC	10.6V to 32V DC
Power Consumption	100mA max	100mA max	100mA max
Reading Range	30cm with Active 928 Tag 10cm with Passive 968 Tag	30cm with Active 928 Tag 10cm with Passive 968 Tag	25cm with Active 928 Tag 7cm with Passive 968 Tag
Reading Range Limitations	Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%	Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%	Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%

Model No.

HD500-2-AB**BC-43Prox****General Description**

High Performance Heavy Duty Proximity Reader designed for both modern office environments and vulnerable locations requiring increased protection. Suitable for both internal and external installations

Proximity Reader with built-in keypad.

Built-in keypad offers the possibility of combined access control with both a card and a PIN for higher security. The metal casing used in Bewator's robust designs protects the reader against tampering and makes it extremely vandal-resistant

Product Specification

Transmit frequency 132kHz,
Receive frequency 66kHz.
64 data bits, read time typically 400ms. 3 separate LEDs & onboard Sounder (internal/external control). Polycarbonate case, fully encapsulated electronics, Stainless Steel outer frame

Built-in keypad, metal casing, vandal-resistant. Transmit frequency 132kHz, Receive frequency 66Hz.
64 data bits, read time typically 400ms

Dimensions (mm)

120H x 100W x 18D

160H x 110W x 47D

Temperature Range

-30 to +50°C

-35° to +50°C

Environmental

IP65

IP55

Power Supply

10.6V to 32V DC

12 to 24 V DC

Power Consumption

100mA Max

100mA Max

Reading Range

25cm with Active 928 Tag
8cm with Passive 968 Tag

10cm with Active 928 Tag
3cm with Passive 968 Tag

Reading Range Limitations

Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%

Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%

Hands-Free Readers

Model No.	HF500-Entro	BC-5511
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General Description	High Performance Hands-Free Reader offering unrivalled reading range using Cotag® Active Technology. Easy to install, slim, modern design to compliment all working environments. Suitable for internal use only	High Performance Hands-Free Reader Pack offering unrivalled reading range using Cotag® Active Technology. Pack Includes HF100 Reading Head (external use) and BC-5311 Reader Interface (internal use only). Easy to install, slim, modern design to compliment all working environments.
Product Specification	Transmit Frequency 132kHz, Receive Frequency 66kHz. 64 data bits, read time typically 400ms, 800ms when noise rejecting AVI mode selected, battery conservation routines. ABS Base, Clip on ABS Front Cover. 3 separate LEDs & onboard Sounder (internal/external control)	Transmit Frequency 132kHz, Receive Frequency 66kHz. 64 data bits, read time typically 400ms, 800ms when noise rejecting AVI mode selected, battery conservation routines. ABS Base, Clip on ABS Front Cover. 3 separate LEDs & onboard Sounder (internal/external control)
Dimensions (mm)	265H x 220W x 29.3D	HF100 - 265H x 220W x 29.3D BC-5311 - 195H x 110W x 40D
Temperature Range	0°C to +50°C	0°C to +50°C
Environmental	IP54	IP55
Power Supply	12V DC	12V DC
Power Consumption	350mA Max	350mA Max
Reading Range	100cm with Active 928 Tag, 30cm with Passive 968 Tag	100cm with Active 928 Tag, 30cm with Passive 968 Tag
Reading Range Limitations	Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%	Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%

Hands-Free Loop Technology Readers

Model No.

BC-5270**BC-5516****General Description**

Integrated Loop Reader Pack. Features Cotag® Technology. Provides, by a buried loop in the ground or round a door, a read range of up to 2 metres. Use only Active cards & tags. Internal use only.

Loop Reader Pack. Features Cotag® Technology. Provides, by a buried loop in the ground or round a door, a read range of up to 2 metres. Use only allows external fitting using a BC-270 Loop Coupler (external use) and a BC-5311 Interface (internal use only). Suitable for Automatic Vehicle Identification (AVI). Use only Active cards & tags

Product Specification

Transmit Frequency 132kHz, Receive Frequency 66kHz. 64 data bits, read time typically 400ms, 800ms when noise rejecting AVI mode selected, battery conservation routines. Impact-resistant polystyrene base and clip-on top cover. Integrated Loop Reader inside one enclosure. TX & RX status LEDs and onboard sounder. Configurable onboard relay.

Transmit Frequency 132kHz, Receive Frequency 66kHz. 64 data bits, read time typically 400ms. BC-5311 - impact - resistant polystyrene base and clip-on top cover. BC-270 - robust polycarbonate case. Weather resistant (not suitable for burial). Simple installation. Tunes simple wire loops for access applications.

Dimensions (mm)

195H x 110W x 70D

BC-270 - 80H x 160W x 56D
BC5311 - 195H x 110W x 70D

Temperature Range

0° to +50°C

BC-270 -40°C to +50°C
BC-5311 0°C to + 50°C

Environmental

IP54

BC-270 IP56
BC-5311 IP54

Power Supply

12V DC

12V DC

Power Consumption

350mA

350mA

Reading Range

2 metre typical with Active 928 Tag or IB-970 Vehicle tag

2 metre typical with Active 928 Tag or IB-970 Vehicle tag

Reading Range Limitations

Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%

Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%

Magnetic Stripe Readers & Keypads

Model No.	BC-16	BC-43	M-43
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General Description	Magnetic Stripe Card-only Reader. For uneven surfaces use the mounting plate. Suitable for external or internal use	Magnetic Stripe Reader with built in keypad. Built in keypad offers the possibility of combined access control with both a card and a PIN for higher security. The metal casing used in Bewator's robust designs protects the reader against tampering and makes it extremely vandal-resistant.	Keypad only. May also be used in parallel with Proximity or Hands-Free Readers.
Product Specification	Magnetic Stripe Card Reader, tough metal construction, standard clock/data output, waterproof, reading head rated at 1,000,000 swipes	Magnetic Stripe Card Reader with built-in keypad. The metal casing used in Bewator's robust designs protects the reader against tampering and makes it extremely vandal-resistant.	Keypad to DC-11 and DC-21 Door Controllers. Cast metal housing, tamper switch fitted, back-lit keypad
Dimensions (mm)	89H x 34W x 34D	160H x 110W x 47D	140H x 80W x 40D
Temperature Range	-20 to 70C	-35 to 50C	-35 to 50C
Environmental	IPX7	IP54	IP54
Power Supply	4.5V - 6.5V	12V to 24V DC	8V - 40V DC
Power Consumption	60mA	50mA	50mA
Reading Range	N/A	N/A	N/A
Reading Range Limitations	N/A	N/A	N/A

Model No.

SM-501**SM-501K**

General Description	Mifare® Contactless Smart Card Proximity Reader. SM500 series readers can read the unique 32 bit serial number in every Mifare® card or data from a location in the Mifare® Application Directory (MAD). This allows easy integration of access control with other smart card applications	Mifare® Contactless Smart Card Proximity Reader with integrated keypad. SM500 series readers can be read the unique 32bit serial number in every Mifare® card or data from a location in the Mifare® Application Directory (MAD). This allows easy integration of access control with other smart card applications.
Product Specification	13.56MHZ Operating Frequency. 3 separate LEDs & onboard Sounder (internal/external control). Hardwired cryptographic algorithm, mutual authentication plus encrypted transmission using session key. Electronics housed within ABS case, fitting to back mounting plate. Push in plugs cover fixing holes	13.56MHZ Operating Frequency. 3 separate LEDs & onboard Sounder (internal/external control). Hardwired cryptographic algorithm, mutual authentication plus encrypted transmission using session key. PIN data transmitted along normal data lines Electronics housed within ABS case, fitting to back mounting plate. Push in plugs cover fixing holes
Dimensions (mm)	120H x 120W x 28.5D	120H x 120W x 28.5D
Temperature Range	-30 °C to +55 °C	-30 °C to +55 °C
Environmental	IP53	IP53
Power Supply	10.0V to 36.0V	10.0V to 36.0V
Power Consumption	80mA	80mA
Reading Range	3cm with Mifare® Smart Card	3cm with Mifare® Smart Card
Reading Range Limitations	Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%	Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%

Model No.

DT-05
DT-05Prox


General Description	Magnetic Stripe Cardreader with keypad for direct connection to any SR32i Segment Controller, without the use of a Door Controller. Suitable for doors not requiring high security. Please note for use with Entro only	Proximity Reader with keypad for direct connection to any SR32i Segment Controller, without the use of a Door Controller. Suitable for doors not requiring high security. Please note for use with Entro only
Product Specification	Magnetic Stripe Card Reader with keypad controlling 1 door. Back-lit keypad, exit request input, input for door monitoring, opening relay for locking devise, cast metal housing, supplied with drop box	Proximity Reader with keypad controlling 1 door. Back-lit keypad, exit request input, input for door monitoring, opening relay for locking device, cast metal housing, supplied with drop box
Dimensions (mm)	160H x 110W x 47D	160H x 110W x 47D
Temperature Range	-35 to 50C	-35 to 50C
Weatherproof	IP54	IP54
Power Supply	10 - 40V DC or 8 - 3-V AC	10 – 40V DC or 8 – 3-V AC
Power Consumption	100mA	150mA
Reading Range	N/A	10cm with Active 928 Tag, 3cm with Passive 968 Tag
Reading Range Limitations	N/A	Typical range specified assumes the card is in its best position and orientation, and that the Reader is not unduly affected by electrical noise. Mounting the Reader onto a metal surface can reduce range by up to 25%.

Custom Finished Reader Covers

To meet the requirements of modern architects and specifiers Bewator has introduced a comprehensive range of Custom Finished Reader Covers, with styles to complement any building's interior.



- **Styles available to complement any building's interior**
- **Extensive range of patterns and colour options available**
- **DDA friendly**
- **Meet the aesthetic requirements of today's modern environment**
- **Available for PR500-AB, SP500-AB & HF500-Entro Readers**





For further details of the complete range of Custom Finishes available and ordering details please see Bewator's 'Access Control Buyers Guide and Price List' and website.





Bewator offers a range of card and tag technologies for use with Bewator access control systems and products. This range includes traditional Magnetic Stripe, Bewator's patented Cotag® Proximity and Hands-Free and Mifare® Smart Cards. Cotag® Active and Passive Technology cards & tags may be easily mixed within the same system allowing customers to allocate the most appropriate tag technology for that cardholder's day to day duties.





Active Technology utilises an onboard battery to boost the reading range between the tag & Reader. By using Active Technology cards & tags in conjunction with long range Readers & Loops, true 'Hands-Free' operation is achievable. In addition to user convenience, Hands-Free technology is well suited for facilitating Disability Discrimination Act requirements.






- **Cotag® Technology Active & Passive cards and tags can share common Readers**
- **Tags and Cards are factory encoded for ease and convenience**
- **Laminates are suitable for thermal dye-sublimation and 3rd party contact Smart Chip insertion**
- **Achieve superior reading ranges using Active 'Hands-Free' Technology cards and tags**
- **Experience 'Hands-Free', the ultimate in Access Control security with minimal intrusion**
- **Hands-Free technology can facilitate compliance to the Disability Discrimination Act**

Model No.	IB-968	IB-961	IB-958	IB-958M
				
General Description	<p>Passive encoded clamshell card. Cost effective Passive card solution. Up to 30cm read range with Hands-Free Readers, 12cm with Proximity Readers</p>	<p>Passive encoded keyring tag. Tough polycarbonate case. Up to 25cm read range with Hands-Free Readers, 10cm with Proximity Readers</p>	<p>Passive encoded ISO laminated card. Ideal for Photo ID applications, can be custom printed both sides. Up to 30cm read range with Hands-Free Readers, 12cm with Proximity Readers</p>	<p>Passive encoded ISO laminated card with IS7811/2 Magnetic Stripe. Ideal for Photo ID applications, can be custom printed both sides. Up to 30cm read range with Hands-Free Readers, 12cm with Proximity Readers</p>


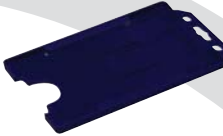


Model No.	IB-928	IB-928-Clear	IB-928-Red	IB-928-Green
				
General Description	<p>Active encoded clamshell card. Featuring Cotag® Active Technology. Up to 1 metre read range with Hands-Free Readers, 30cm with Proximity Readers</p>	<p>Clear Active encoded clamshell card. Featuring Cotag® Active Technology. Up to 1 metre read range with Hands-Free Readers, 30cm with Proximity Readers</p>	<p>Red Active encoded clamshell card. Featuring Cotag® Active Technology. Up to 1 metre read range with Hands-Free Readers, 30cm with Proximity Readers</p>	<p>Green Active encoded clamshell card. Featuring Cotag® Active Technology. Up to 1 metre read range with Hands-Free Readers, 30cm with Proximity Readers</p>

Model No.	IB-928-Purple	IB-928-Blue	IB-911	IB-970
				
General Description	Purple Active encoded clamshell card. Featuring Cotag® Active Technology. Up to 1 metre read range with Hands-Free Readers, 30cm with Proximity Readers	Blue Active encoded clamshell card. Featuring Cotag® Active Technology. Up to 1 metre read range with Hands-Free Readers, 30cm with Proximity Readers	Active keyring tag Featuring Cotag® Active Technology. Tough polycarbonate case. Up to 75cm read range with Hands-Free Readers, 25cm with Proximity Readers	Active encoded vehicle tag Featuring Cotag® Active Technology. Used with Loop Technology Readers, attaches to underside of vehicle.

Model No.	IB-1	CR80M	SC558
			
General Description	Magnetic Stripe Card. Factory encoded, supplied sequentially	Blank Magnetic Stripe Card. Suitable for Photo ID applications. Factory encoded, supplied sequentially	Mifare® Smart Card. Note these cards are unprogrammed. The SM500 Smart Card Readers will read the Card Serial Number for access applications

Cards & Tags Read Range Table					
Reader	Cards / Tag				
	IB-968	IB-961	IB-958	IB-928	IB-911
HF500-Entro	30cm	25cm	30cm	100cm	75cm
PR500-AB	12cm	10cm	12cm	30cm	25cm
SP500-AB	10cm	8cm	10cm	30cm	25cm
HD500-2-AB	8cm	6cm	8cm	25cm	20cm
PM500-AB	8cm	6cm	8cm	25cm	20cm
BC-610Prox	3cm	6cm	3cm	10cm	10cm
BC-615Prox	3cm	3cm	3cm	10cm	10cm
BC-43Prox	3cm	3cm	3cm	10cm	10cm

Model No.	AC201	AC209	AC217	YA302L
				
General Description	Metal Lever clip & strap. Supplied in quantities of 100	Metal 2.4mm bead chain 90cm. Supplied in quantities of 100	Yo-Yo, blue plastic with card and belt loop attachment. Supplied in quantities of 100	Card protector (no clip supplied), clear, horizontal. Supplied in quantities of 100

Model No.	YA302P	YA304	YA306L	YA306P
				
General Description	Card protector (no clip supplied), clear, vertical. Supplied in quantities of 100	Blue card protector (vertical & horizontal). Supplied in quantities of 100	Clear polycarbonate holder (no clip supplied), horizontal. Supplied in quantities of 100	Clear polycarbonate holder (no clip supplied), vertical. Supplied in quantities of 100

Door Entry Phone Systems

It is a natural requirement for most businesses to secure their premises, but they must also have a simple and convenient method of allowing access to visitors and employees. The simplest and most convenient way of solving this problem is to install a modern Door Entry Phone System. Bewator has a range covering three different solutions. Bewatel provides a hardwired solution, Bewacom utilises a company's existing internal switchboard and Telecode allows access to remote doors via a Public Switched Telephone Network. Between them they cover every requirement, be it large, small, commercial or residential.



Bewatel

A Door Entry Phone System for one to four hardwired dedicated handsets, with the option of a built-in Keypad for staff access, ideal for the small business. Three variants are available; the BT-41 is designed for connection to one internal handset, the BT-44 for connection of up to four handsets, whilst the BTK-41 connection to one internal handset and a keypad to allow staff or resident access.

Bewacom

A sophisticated Door Entry Phone System that connects directly to a company's internal PABX switchboard (requires a 2-wire analogue line). The system acts as an extension of the switchboard, so there is minimal hard wiring and access can be granted from any extension on the system. There are two variants, the BM3 with a built in Keypad and the BM31 for connection to one nominated extension.

Telecode

Telecode is a patented BABT approved Door Entry System that can be connected directly to the public telephone network (PSTN), removing the need for hardwiring of handsets and allows users to open secured doors from their own telephone handsets or via a mobile phone. This makes the system ideal for applications where such hardwiring is either unpractical or too costly, thus providing a simple solution for controlling access through remote doors. Telecode also comes with a built-in keypad enabling tenants and regular callers to gain access via an assigned code.

Model No.

BT-41**BT-44****BTK-41****General Description**

Door Entry Phone with one call button. Hardwired via 6-core telephone to V-801 or B-801 handsets. Up to 3 handsets can be connected in parallel, max 50 metres

Door Entry Phone with four call buttons. Hardwired via 6-core telephone to up to 4 V-801 or 4 B-801 handsets. Up to 3 handsets can be connected in parallel to each call button, max 50 metres

Door Entry Phone with one call button and built in Keypad allowing up to 20 x 4-digit codes plus 10 x 6-digit codes. Hardwired via 6-core telephone to V-801 or B-801 handsets. Up to 3 handsets can be connected in parallel, max 50 metres

Dimensions (mm)

200H x 80W x 40D

200H x 80W x 40D

200H x 80W x 40D

Door Opening Time

1 – 40 seconds

1 – 40 seconds

1 – 99 seconds

Relay Output

Voltage-free relay contact 2A 28V DC

Voltage-free relay contact 2A 28V DC

Voltage-free relay contact 2A 28V DC

Additional Outputs

CCTV relay output

CCTV relay output

CCTV relay output

Temperature Range

-35 to 50C

-35 to 50C

-35 to 50C

Environmental

IP 54

IP 54

IP 54

Power Supply

12-24V AC/DC

12-24V AC/DC

12-24V AC/DC

Power Consumption

200mA

200mA

200mA

Housing

Cast metal housing, stainless steel buttons

Cast metal housing, stainless steel buttons

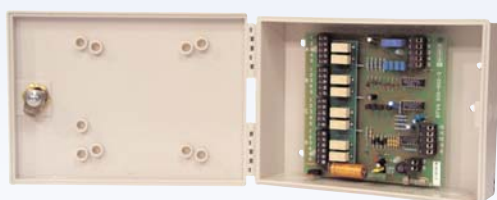
Cast metal housing, stainless steel buttons

Model No.

BTVX

V-801

B-801



General Description	Exchange Unit for connecting up to 4 Door Entry Phones to 1 handset via 6 core telephone wire	White, wall mounted handset for Bewatel. Integrated buzzer and remote opening button. Three handsets can be connected in parallel to a Door Entry Phone, 50 metres max	White, desk mounted handset for Bewatel. Integrated buzzer and remote opening button. Three handsets can be connected in parallel to a Door Entry Phone, 50 metres max
Dimensions (mm)	80H x 200W x 40D	220H x 80W x 55D	220H x 80W x 55D
Temperature Range	Internal use only	Internal use only	Internal use only
Environmental	Internal use only	Internal use only	Internal use only
Power Supply	12-24V AC/DC	From Door Entry Phone	From Door Entry Phone
Power Consumption	60mA	From Door Entry Phone	From Door Entry Phone
Housing	White plastic housing with security lock	N/A	N/A

Model No.

BM-31**BM-3****General Description**

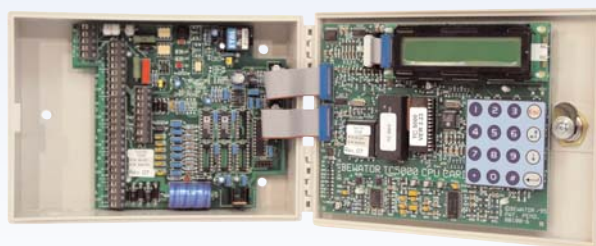
Door Entry Phone for a company's internal PABX switchboard. 1 call button for connection to a 1 nominated extension. Requires an analogue extension

Door Entry Phone for a company's internal PABX switchboard. Can call any extension on the system. Includes a built in keypad allowing up to 4 x 4-digit codes. Requires an analogue extension

Dimensions	200H x 80W x 40D	200H x 80W x 40D
Door Opening Time	7 seconds	1 – 99 seconds
Relay Output	Voltage-free relay contact 2A 28V DC	Voltage-free relay contact 2A 28V DC
Additional Outputs	CCTV relay output	CCTV relay output
Temperature Range	-35 to 50C	-35 to 50C
Environmental	IP 54	IP 54
Power Supply	12-24V AC/DC	12-24V AC/DC
Power Consumption	200mA	200mA
Housing	Cast metal housing, stainless steel buttons	Cast metal housing, stainless steel buttons

Model No.

Telecode Controllers



General Description	Telecode Controller for 1 to 6 doors and up to 20 to 300 stored telephone numbers. Connects to TP5 or M65 at the door. Easy to programme via integral keypad and display. Could also be remotely programmed with REMO PC-based software.	
Door Capacity/ Stored Numbers	Variants available: 1 door and 20 stored numbers – TC-20 2 doors and 30 stored numbers – TC-30/2 4 doors and 40 stored numbers – TC-40/4 5 doors and 60 stored numbers – TC-60/5 6 doors and 300 stored numbers – TC-300/6	
Dimensions	140H x 200W x 60D	
Door Opening Time	1 - 999 seconds	
Temperature Range	0 to 50C	
Environmental	Internal use only	
Power Supply	24V AC/DC (TA24AC Transformer supplied)	
Power Consumption	250mA	
Housing	Glass reinforced polycarbonate, tamper protected, lockable housing for wall mounting	

Model No.	TP/5	M-65	NP-Flex	V-801-TC	B-801-TC
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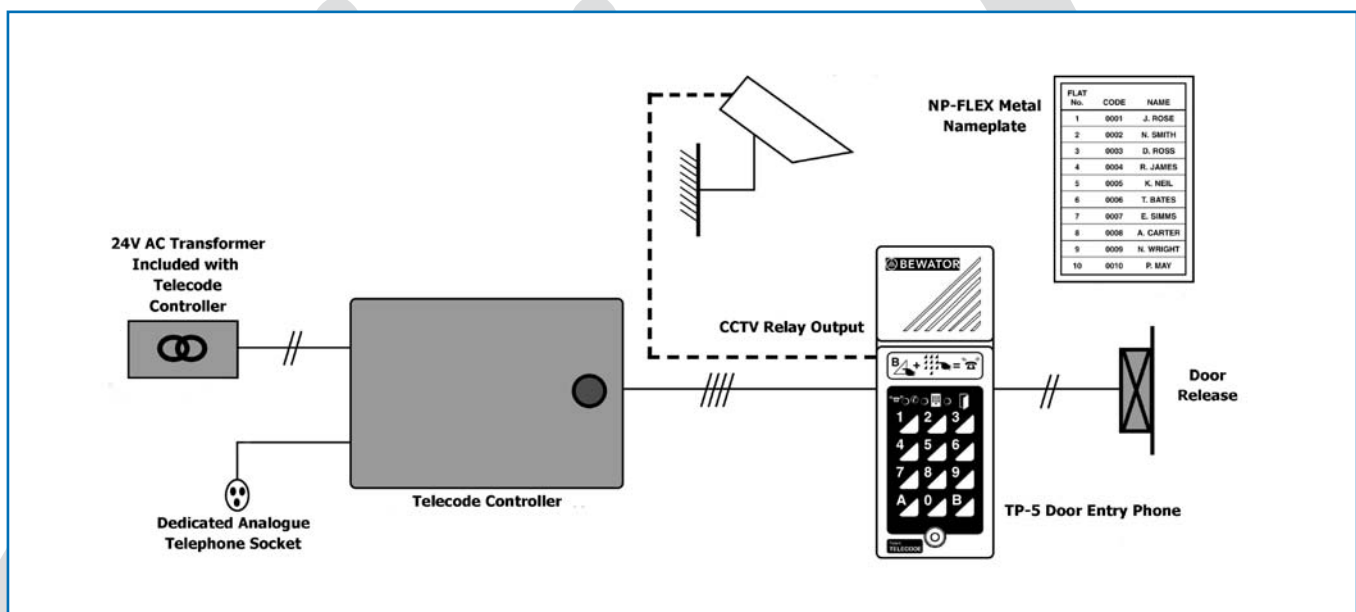
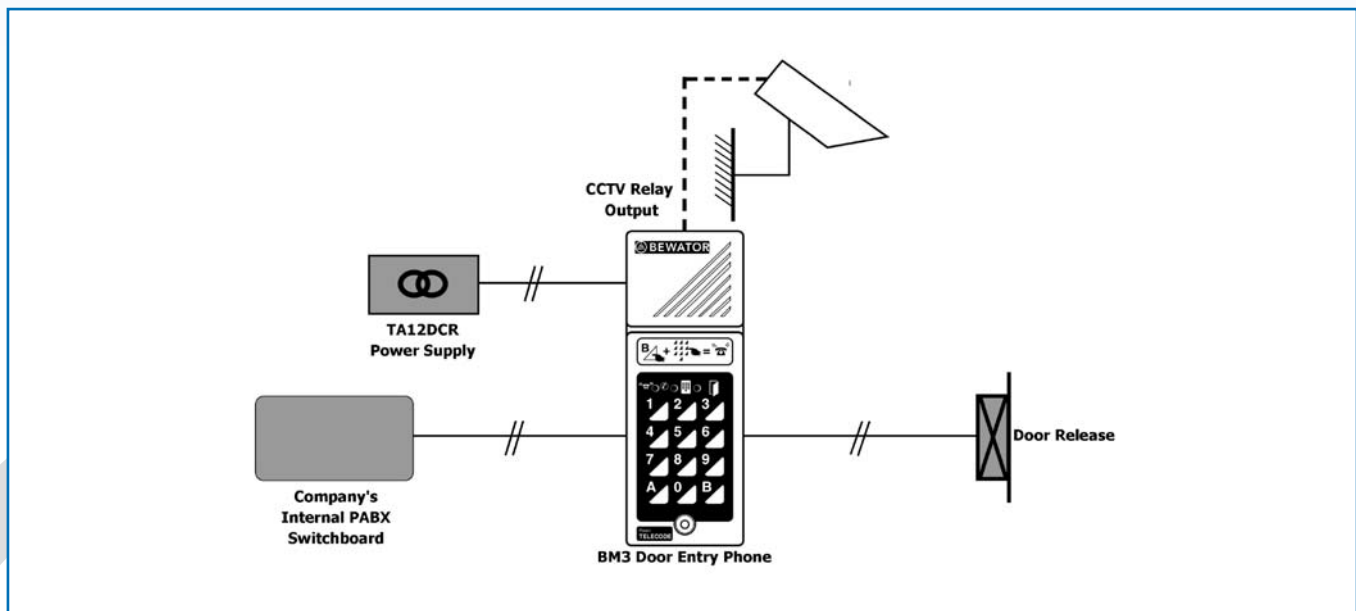


General Description	Door Entry Phone for connection to Telecode Controller. Built in Keypad with 99 x 4-digit codes	Keypad for connection to Telecode Controller, for doors not requiring audio access.	Metal nameplate in rugged frame with toughened glass. For use with laser printed sheets (one supplied). Templates for MS-Word included	White, wall mounted handset for direct hard wiring to Telecode Controller Integrated buzzer and remote opening button.	White, desk mounted handset for direct hard wiring to Telecode Controller Integrated buzzer and remote opening button.
Dimensions (mm)	200H x 80W x 40D	140H x 80W x 36D	263H x 170W x 20D	220H x 80W x 55D	N/A
Relay Output	Voltage-free relay contact 1A 28V DC	Voltage-free relay contact 1A 28V DC	N/A	N/A	N/A
Additional Outputs	CCTV relay output	N/A	N/A	N/A	N/A
Temperature Range	-35 to 50C	-35 to 50C	N/A	Internal use only	Internal use only
Environmental	IP 54	IP 54	N/A	Internal use only	Internal use only
Power Supply	12-24V AC/DC From Telecode Controller	12-24V AC/DC From Telecode Controller	N/A	From Telecode Controller	From Telecode Controller
Power Consumption	200mA	200mA	N/A	From Telecode Controller	From Telecode Controller
Housing	Cast metal housing, stainless steel buttons	Cast metal housing, stainless steel buttons	Metal frame with toughened glass	N/A	N/A

Accessories

REMO	Telecode software for remote programming of Telecode Controllers
TA12DCR	12V DC regulated PSU at 1.5 amperes
BB5	Flush mounting kit for Door Entry Phones
BB3	Flush mounting kit for M-65 keypad
SK-5	Security relay, prevents illegal entry from keypad
SH-2	Rain Hood for M-65 keypad
	Recommended when units are mounted externally
SH-3	Rain Hood for Door Entry Phones
	Recommended when units are mounted externally

(For the full range of accessories, PSUs, door releases, spy proof covers, additional weather protection, spare locks and keys please see page 54).





Installation Accessories

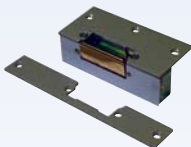
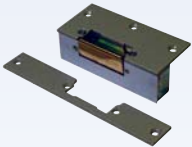
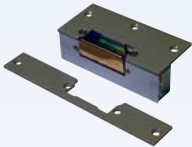
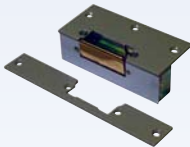
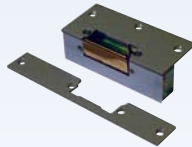
Bewator offer a wide range of accessories, further enhancing the performance and installation of our Access Control products and systems. Our range covers Locking Devices, Power Supplies, Exit Buttons, Break Glasses, Printers and even spare keys. In this section you should be able to find the most suitable accessory for your system, be it new or an upgrade.






- **High quality accessories**
- **Comprehensive range**
- **Cost effective solutions**
- **Ensuring a complete, simple installation**



Door Releases

Model No.	210-12V	209-12V	209-24V	206-12V	206-24V
					
General Description	Universal 12V locking release for rim mortice mounting. Fail-secure (N.B. Not continuously rated)	Universal 12V locking release for rim mortice mounting. Fail-secure. Continuously rated	Universal 24V locking release for rim mortice mounting. Fail-secure. Continuously rated	Universal 12V locking release for rim mortice mounting. Fail-safe	Universal 24V locking release for rim mortice mounting. Fail-safe

Slim Maglocks (Holding Force 300Kg)

Model No.	MS-15-SSU-12	MS-15-SSM-12	MS-15-Z&L
			
General Description	Surface mount single maglock unmonitored, 12V	Surface mount single maglock monitored, 12V	Z & L bracket for inward opening doors

Transom Maglocks (Holding Force 300Kg)

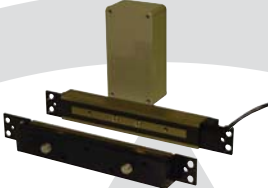

Model No.	MS-20-SFU-12	MS-20-SFM-12	MS-20-WPU-12
			
General Description	Flush mount single maglock , unmonitored, 12V	Flush mount single maglock , monitored, 12V	Waterproof maglock , unmonitored, 12V

Maxi Maglocks (Holding Force 600Kg)

Model No.	MS-30-SSU-12	MS-30-SSM-12	MS-30-WPU-12	MS-30-Z&L
				
General Description	Maxi maglock, single surface mounted, unmonitored, 12V	Maxi maglock, single surface mounted, unmonitored, 12V	Maxi maglock, waterproof, unmonitored, 12V	Z&L bracket for inward opening doors

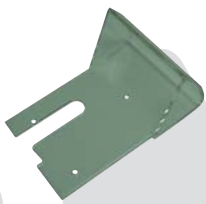

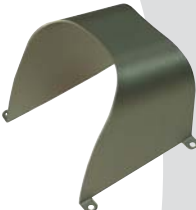

Shear Maglocks (Holding Force 1000Kg)

Model No.	MS-40-SFM-12	MS-40-SSM-12
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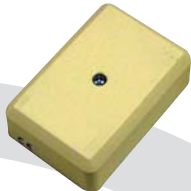


		
General Description	Flush mount single maglock unmonitored, 12V	Surface mount single maglock monitored, 12V

Model No.	9502	PAARFLEX-CY	BB3	BB4
				
General Description	Belden 9502 cable 300m reel	Specialist 2 x twisted pair cable for Bewator Entro. 100m reel	Flush mount kit for K-42, K-44 DUO, and M-65	Flush mount kit for BC-615, BC-43 and DT-05

Model No.	BB5	BB7	SH-1	SH-2	SH-3
					
General Description	Flush mount kit for Bewacom, Bewatel and Telecode TP-5	Flush mount kit for the IP810 InfoPoint Reservation Terminal	Rain Cover for all Codelocks, Cardreaders and Door Entry Phones	Rain Hood for Codelocks	Rain Hood for Door Entry Phones

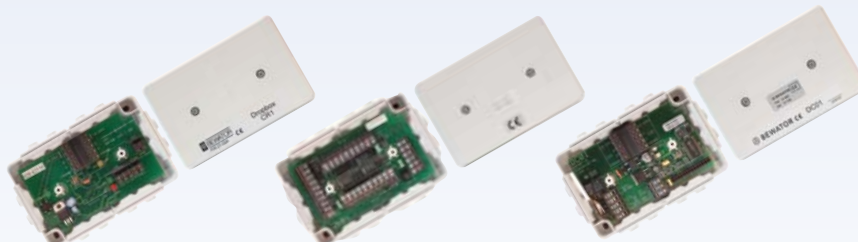
Model No.	SH-4	Mounting	IS-391	SK-5
				
General Description	Rain Hood for Cardreaders	BC-402 and BC-16 Cardreader mounting plate for uneven surfaces	Spy proof cover for all Codelocks	Security Relay - Prevents illegal entry keypad/Cardreader. Use with K-44 DUO, BC-615, Bewacom, Bewatel and Telecode

Model No.	MK-814	3E0656	3E0658	WG2001-SG
				
General Description	Remote override/exit button	Green exit button, black bezel. Stainless steel front	Vandal resistant exit button. Stainless steel front	Break glass unit. Green, surface mount. Single pole

Model No.	KG1	E7	SKR-YN	SKR-SN
				
General Description	Pack of 10 replacement glasses for WG2001-SG	Duple pole slave change over relay, 12V or 24V	Security screw M4 x 10 Secufast (pack of 12)	Security screwdriver TORX

Model No.	73-404	TX20H	CCP-020K
			
General Description	Security driver bit for HD500 and BC-605 (INSEXPIN)	Security driver bit for HD500-2-AB (RESISTORX)	Magstripe Reader head cleaning kit

Model No.

CR-1**MULTI-BOX****DC-01****IOR6****General Description**

Reader interface for BC-615 when being networked with Bewator Entro (one per reader).

Multi-box used to connect two Readers to the input of a BC-640-KP or DC-11 or DC-21 in an Entro system

Door interface for controlling doors without a Reader. Used for general control like timing functions or door monitoring. For use with Entro only

Input/Output Unit. Four inputs and six outputs. Intended for use in elevator control applications or functions such as machine control. For use with Entro only

Model No.

InfoPoint - IP810**CF8****MODEM-DU-HST MODEM-DU-REM****General Description**

Information Terminal for Integrated Reservation Function. TCP/IP based, colour screen, and keypad. Integral Proximity Reader. Is used to send and receive information from a web server based in a CF8 Memory Card inserted in a SR32i Segment Controller. For use with Entro only

SR32i Memory Card for Integral Reservation Function, inserted in dedicated slot in SR32i Segment Controller. For use with Entro only

Modem for PC connection (host). For use with Entro only




Modem for SR32i Segment Controller connection (remote). For use with Entro only

Model No.

REMO
[DOWNLOAD FREE FROM OUR WEBSITE](#)
General Description

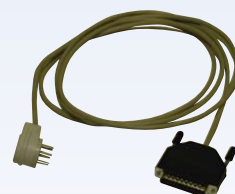
Telecode software for remote programming of Telecode Controllers

Model No.	TA12DCR	TA24AC
		
General Description	12V DC regulated PSU at 1.5 amperes	24V AC 0.8 amperes transformer

Model No.	BA112	BA212	BA125
			
General Description	12V battery backed PSU at 1 amperes. Battery not included	12V battery backed PSU at 5 amperes. Battery not included	12V 7 amperes hour sealed lead acid battery for BA112 and BA212

Printers

Model No.



General Description

Portable printer, rechargeable, 40 column. For use with BC-615, BC-640 and Entro (direct connection to SR32i)

Printer, 80 column, dot matrix. For use with BC-615, BC-640 and Entro (direct connection to SR32i)

Female Printer lead, Cardreader/controller to wall socket

Male Printer lead, wall socket to printer

Spare Locks & Keys

Model No.

ABLOY-LOCK

ABLOY-KEY

BC400-LK



General Description

Replacement key barrel for obsolete old style **Codelocks and Cardreaders**. Supplied with two keys

Replacement / extra key for obsolete old style **Codelocks and Cardreaders**. Please quote barrel letter code

Replacement key barrel for all **Codelocks and Cardreaders and Door Entry Phones**. Supplied with two keys

Model No.

BC400-K

CONTROL-BOX-LOCK

CONTROL-BOX-KEY



General Description

Replacement / extra key for all **Codelocks and Cardreaders and Door Entry Phones**. Please quote barrel letter code

Replacement key barrel for **SR32i, DC-11, DC-21, Telecode and BC-640KP control boxes**. Supplied with two keys

Replacement/extra key for **SR32i, DC-11, DC-21, Telecode and BC-640KP control boxes**.

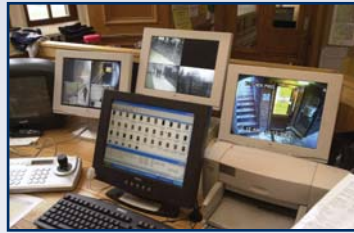


Event Log		
2004-10-03	09:39	Elevator
2004-10-03	09:39	Office
2004-10-03	09:39	Office
2004-10-03	09:39	Warehouse
2004-10-03	09:40	Garage
2004-10-03	09:40	Department
2004-10-03	09:40	Elevator
2004-10-03	09:41	Garage
2004-10-03	09:41	Garage
2004-10-03	09:41	Warehouse
2004-10-03	09:41	Elevator
2004-10-03	09:41	Office

Who uses Bewator Products?

Clares College – Cambridge University

Bewator's access control equipment has now been fitted to 36 doors throughout the site, including some within Old Court, a Grade I star-listed building dating from the seventeenth century. Some 1,000 students, graduates, fellows and staff all carry personalised security cards which, when held in the proximity of electronic readers, automatically release locks to open doors to authorised areas.



Gt. Ormond St. Hospital

This is a large system operating in a very busy environment. The security system needed to be easy to use and reliable, yet flexible enough to adapt to the hospital's future requirements. David de Wet, assistant site services manager at Great Ormond Street, says: "We wanted to secure the building in the face of rising crime in the area. We need to protect our patients and staff from thieves, and also to secure the safety of the drugs and equipment used in the hospital".



Bolton Metropolitan Council

The existing system used Bewator Proximity Readers, which were easy and quick enough for able-bodied users, but can be inconvenient for those in wheelchairs. Hands-Free Readers with Active Card Technology already specified in certain areas have now been specified throughout the system. The Hands-Free Readers have an extended reading range so users do not even have to get their card out of their pocket and meet the requirements of the DDA (Disability Discrimination Act). This makes it quick and easy for everyone, whether in a wheelchair or not.



Georges Quay - Dublin

200 Bewator Proximity Readers were installed together with Hands-Free long range Readers throughout the site to control access to the car parks and lifts, as well as the main entrances, secondary entrances to floors, offices and other secure areas. Alfie Walsh, Sales Manager with security installer Electro Automation, says: "This is a very large development and we needed a system which is powerful enough and flexible enough to cope with a wide range of access control tasks".



Ferrari & Maserati - Surrey

In all, 32 external and internal doors at the site are being secured with Bewator Proximity Readers, together with three Hands-Free Readers at vehicle barriers. Staff use latest Active Card Technology, the Cotag® 928, as well as Bewator Proximity cards.

Access - To enter protected areas or premises

Access Control - A method of automatically controlling entry to and/or exit from protected areas or premises

Access Control Database - A store on the computer or controllers of all the records required to make the access control system function as required

Access Control Software - A group of programs which are run, when required, on a computer (usually a PC) which perform specific tasks associated with setting up and using the access control system

Access Control System - Equipment used to control automatically the passage of people and vehicles into and out of protected areas and premises

Access Decision - The response by a controller to an access request (either access granted or access denied)

Access Denied - The access code does not allow a cardholder to gain entry to the protected area or premises

Access Granted - The card number and site code (and PIN if required) allow a cardholder to gain entry to the protected area or premises

Access Group - A list of areas to which a cardholder is allowed access. Access may be restricted to certain times by the use of a Time Schedule

Access Point - A Reader, usually at a point of entry or exit (door, gate, barrier, turnstile) where access is controlled (and monitored) by an access control system. Points of entry or exit which are used for anti-passback or roll call require two Readers and therefore two access points

Active Technology - Where an onboard long-life lithium battery enhances the output signal from a card or tag to the Reader

Address - A combination of numbers which uniquely identifies equipment on an access control system

Alarm - Warning of a possible breach of security of some kind

Alarm Actions - Instructions to be carried out when an alarm occurs

Alarm Bypass - Allows integration into a premises intruder protection system allowing arm/disarm control

Alarm Message - A message generated by the access control system when an alarm condition occurs. This message is received by the computer and interpreted by the access control software

Anti-Passback - The limiting of a card or tag's use in one direction without first having been used in the opposite direction. Requires IN and OUT Readers

Archive - A copy of the access control database kept for security against loss of data

Automatic Vehicle Identification (AVI) - Method of reading a vehicle tag fastened to the bottom of a vehicle using a loop antenna buried in the roadway. Can also apply to identification of the driver's card using a side loop or Reader

Backup - A second copy of a file, made as security against loss of data

Battery Backup - An alternative standby energy source that maintains system operation for a period of time in the event of a power failure

Baud Rate - The number of bits per second in data transmission

BC Link - Bewator propriety Reader interface

Bewacom - A Door Entry Phone System that connects directly to a Company's PABX system

Bewatel - A hardwired Door Entry Phone System

Break Glass Unit - Allows emergency release of electronically locked doors

Buffer - A temporary store for data, usually in RAM

Card - An encoded card that can be read by a Reader. Also referred to as a token or tag

Card Number - One of the numbers programmed into the card. The card number is linked to the cardholder in the cardholder record

Card Technology - The physical method by which numbers are stored within cards

Card Transaction - The act of reading data from a card and passing it to the access control system

Cardholder - A person to whom a card has been issued. (Also known as user)

Cardholder Record - One of a number of records in the access control database, each of which links a cardholder's name to the card number and an access group. (Can also contain other data such as PIN and personal details)

Cardreader - Equipment that reads data from a card (and PINpad if fitted) and transmits it to a controller. May include indicator lights

Clamshell - A card that is manufactured by the welding of two outer protective casings

Clock & Data - Industry standard Reader interface

Codelock - Digital compact keypad, allowing entrance via the use of allocated PIN codes

Command - An order or instruction that the operator gives to the system, usually at the computer keyboard.

Also an instruction sent by a computer to a controller. The transmission of messages between devices

Common Code - A single PIN code that is allocated to all users

Computer - The device which runs the access control software and thereby maintains the access control database, sends commands and data, receives and logs system messages, and generates reports

Configuration - The relationship of system components to each other

Controller - A device which polls Readers, makes access decisions and sends messages to the computer. May also handle other inputs and outputs

Database - (See access control database)

DDA - Disability Discrimination Act. Government legislation forbidding discrimination of the disabled

Default - A standard condition or value determined by the system unless changed by operator intervention

Device - Any piece of equipment connected to a system

Dial-up Telephone Line - A normal telephone line which is used by a computer to communicate with controllers at remote sites via modems, and vice versa

Door - The physical means of controlling access through an access point. Includes barriers, gates, turnstiles

Door Contact - Door monitoring switch which changes state when a door is opened or closed

Door Controller - A controller which is directly connected to the Segment Controller (see Segment Controller) and the Reader. Also contains connections for the Door Release (see Door Release), Egress Button (see Egress Button) or Break Glass Unit (see Break Glass Unit)

Door Forced Alarm - An alarm that is activated when a door is opened without a valid access request or the door exit control being used

Door Release - An electro-mechanical device used to lock or unlock a door

Door Monitoring Switch - Switch which changes state when a door is opened or closed

Door Open Alarm - An alarm that is activated when a door remains open longer than a specified time

Duress Alarm - An alarm that is covertly activated by entering a special PIN at an access point, the cardholder being granted access as normal so as not to arouse suspicion

Egress Button or Switch - A means of unlocking a controlled door from the secure side without a valid access request. Also referred to as door exit control

Entro - PC based Access Control software. Used for programming, editing and reporting of data and events

Event - Any system activity which takes place following a specified occurrence

Fail-Safe - A door lock that unlocks the door if power fails and requires continuous application of power to stay locked

Fail-Secure - A door lock that locks the door if power fails and requires the application of power to unlock the door

Hands-Free - Reading technology which enables a cardholder to gain access without having to hold the card in the hand. Typically giving ranges of up to 1 metre with HF500-Entro Readers or up to 2 metres with a Loop aerial

Hardware System - A Local Hardware System is one or more controllers connected to one serial port on any computer on the host computer's network. A Remote Site Hardware System is one or more controllers connected to a dial-up modem

Heavy Duty Reader - A Proximity Reader manufactured from stainless steel and polycarbonate. Ideal for use in locations vulnerable to physical attack

Holiday - The access control software can be configured to provide different time frames on days designated as holidays

I/O - Input/output

IN Reader - A reader that changes the status of a card in the cardholder record from OUT to IN for the purposes of the anti-passback and roll call functions

Indicator Light - A red or green or amber indicator lamp that shows the system's response to an access request

Input - An input is a signal which is monitored by a controller. Dedicated inputs are door exit control (egress), door contacts, controller/PSU tamper and PSU monitor

Interface - A device or protocol which enables communication between one device and another

Invalid Card - A card which is not allowed access

ISO Laminated Card - A passive 'credit card' sized card suitable for use with Photo ID applications (see Thermal Dye-Sublimation)

Jumper - A small shorting plug on a printed circuit board which can be moved to set an option

LAN - Local Area Network. Used in PC networks and can be utilised for Access Control communications (see Network)

LED (light emitting diode) - Small indicator light

Local Hardware System - See Hardware System

Loop Antenna - A piece of wire driven from a controller which is used to interrogate Active cards and tags

Maglock - An electro-mechanical device which uses magnets on the door and the frame to lock or unlock a door

Magnetic Stripe Card - A card that contains a band of ferrous material that can be magnetically encoded

Menu - A displayed list of commands or features available to the operator

Mifare® - A registered trade name for Smart Card technology (see Smart Cards)

Modem - A device which transmits and receives binary data across a telephone line. Used to communicate with controllers at remote sites

Monitor - Either, a part of the access control software which displays transactions. Or, the monitoring of certain parts of the access control system (door, input, etc) to check for certain conditions and generate alarms if necessary

Mullion Mount Reader - A Proximity Reader designed to suit door architraves

Network - Sometimes called a "local area network" or LAN. Connects computers together so that they can share files, printers and other peripherals. Any computer on the host computer's network can be connected to a Hardware System

Off Line - Communications between the computer and the access control system are halted

On Line - Communications between the computer and the access control system are open

Operator - Someone who has authority to log in to all or parts of the access control software

OUT Reader - A reader that changes the status of a card in the cardholder record from IN to OUT for the purposes of the anti-passback and roll call functions

Output - An output is a signal provided by a controller

PABX - Private Automatic Branch Exchange. Used by company's to run their internal telephone systems

Panel Mount Reader - A Proximity Reader designed to fit most 3rd party panels, such as Door Entry Phones

Passive Technology - A cost effective technology where the user has to actively present a card or tag to a Reader. Read ranges are typically around 10cm with Proximity Readers

Password - An alphanumeric code which, if recognised by the access control software, allows access to the access control database and other software functions

PC - A computer

PIN (Personal Identification Number) - A confidential 4-digit code assigned to a cardholder which is entered at a PINpad

PINpad - A keypad at which a cardholder enters his or her PIN

Port - A connection that provides a means of communication between devices

Proximity - Security industry term to describe Readers which read cards or tags without physical contact, but involving the act of presenting the card or tag to the Reader

PSTN - Public Switched Telephone Network. Used for standard telephone lines

PSU - Power Supply Unit

Rain Hood - A cover that protects Readers or Door Entry Phones from rain in exposed locations

Reader - The device that reads data from a card or tag and communicates the information to the controller for validation

Reading Head - A proprietary antenna which is used to interrogate cards or tags. Must be used with an interface to connect to the Access Control system

Reconfigure - Send the access control database to the controllers

Record - A unit of data stored on the computer which specifies the configuration of a particular part of the system, for example, a cardholder, an access point, a time schedule

Re-index - Tidy and condense the access database, removing deleted records and updating index files

Relay - Device which can switch high voltages and/or currents using a low power logic signal

Remote Site - A site which has controllers which are not connected directly to the host computer. The controllers communicate with the host computer at pre-configured times via a modem and a normal dial-up telephone line or via a LAN or WAN

Report - Either, a message indicating system abnormality, but which is not an alarm message. Or, a compilation of data from the log file or the access control database which can be displayed on the screen or sent to a printer

Reset - The condition of a device in its clear or inactive or normal state. Also, to switch a device to its inactive state.

Also, the clearing of all or part of a system, returning the parameters to their default values

RFID - Radio Frequency Identification. The system by which data is transferred from cards and tags to Readers

Roll Call - A report which lists cardholders who are currently within a zone. (Also see IN reader, OUT reader and anti-passback)

RS232 - A standard way of transmitting and receiving data down a cable. Usually used by the computer for distances up to 25 metres

RS485 - A standard way of transmitting and receiving data down a cable over much greater distances than RS232.

Used by the access control system

Rx - Shorthand for anything to do with the receiving side of an RF (radio frequency) system or data communications

Segment Controller - A controller that contains data for the Access Control system and validates or not card transactions. There are 5 variants capable of connection to up to 2, 4, 8, 16 or 32 Readers

Shadow Card Pack - A set of cards used to programme and delete cards into a standalone Magnetic Stripe Card-only Reader

Smart Card - A multi-application card often used for Cashless Vending. Access Control Readers can utilise the unique chip serial number found in every card, thus saving the need for a user to hold more than one card

State/Status - The current setting or condition of an access control parameter or variable

Swipe Card - Card which, to be read, must be passed through, or pushed into, a slot in the Cardreader

Switch Plate - A Proximity Reader that is designed to fit most single gang back-boxes

Tag - See card

Tamper - Unauthorised physical interference with the system, usually by opening enclosures or cutting or short circuiting cables

Tamper Switch - A switch that activates an alarm when a tamper condition is detected

Telecode - A patented Door Entry Phone System that connects directly the public telephone network (see PSTN), removing the need for hardwiring of handsets

Thermal Dye-Sublimation - A process where Photo ID cards are created by a printer heating the dye from a ribbon and then diffusing the colours into the plastic of an ISO Laminated Card (see ISO Laminated Card)

Time Schedule - A time slot linked with days of the week and holidays

Toggle - When a card or PIN is entered the first time, the door is opened and will remain unlocked until the card or PIN is entered a second time

Token - See card

Transaction - Any activity occurring in the system

Transaction Log - File stored on the computer which contains all the transaction messages received by the computer. Used as a source of data for reports

Tx - Shorthand for anything to do with the transmitting side of an RF (radio frequency) system or data communications

Uninterruptible Power Supply (UPS) - A backup system that continues to supply pseudo-mains power for a short time in the event of a mains power failure

User - A cardholder. (As distinct from an operator)

Valid Card - A card which is allowed access

Validation Date and Time - The date and time when a system will validate or invalidate a card

Visitor Card - A card assigned for temporary use

WAN - Wide Area Network. Used in PC networks and can be utilised for Access Control communications (see Network)

Zone - An area within a site or facility, bounded by walls and by access points, used with anti-passback and roll call

Conditions Of Sale

1 GENERAL

1.1 - The following are the terms and conditions (.Conditions.) of the contract (.Contract.) under which Bewator Limited (.the Company.) is to supply the goods and/or services specified in the Company's acknowledgement of order attached to these Conditions or otherwise agreed in writing by the parties (the .Equipment.) to the person placing that order (the .Customer.).

1.2 - No other terms, conditions or warranties shall apply unless agreed to in writing by the Company. These Conditions shall prevail over any terms and conditions of purchase of the Customer.

1.3 - No variation to these Conditions shall be binding unless agreed in writing by the Company.

1.4 - The employees and agents of the Company are not authorised to make representations as to the description, quality or fitness for any particular purpose of any of the Equipment, unless confirmed in writing by the Company. The Customer acknowledges that it has not relied on, and waives any claim for breach of, any such representations which have not been so confirmed.

2 SALE

2.1 - The Company shall sell and the Customer shall purchase the Equipment subject to these Conditions.

2.2 - Orders accepted by the Company may only be cancelled or rescheduled with the Company's consent in writing

3 PRICE AND PAYMENT

3.1 - The price of the Equipment shall be the Company's quoted price or where no price has been quoted, the price listed in the Company's Price List and Buyers Guide current at the date of acceptance of the Customer's order.

3.2 - Any prices quoted which are not in the Price List and Buyers Guide or other published price list are valid for 30 days only unless otherwise stated or withdrawn. All orders remain subject to acceptance by the Company.

3.3 - Payment of invoices shall unless otherwise agreed in writing be made in full without any deduction or set-off by the due date.

3.4 - Failure to make due payment in respect of any deliveries or installments under this or any other contract between the Customer and the Company shall entitle the Company to delay, suspend or cancel deliveries in whole or in part at its option.

3.5 - Any extension of credit allowed to the Customer may be changed or withdrawn at any time. Any credit accounts are payable 30 days from invoice date unless otherwise agreed by the Company in writing. Any dispute by the Customer regarding the validity of the invoice shall be notified to the Company in writing within 14 days of the invoice date.

3.6 - If payment is not made in full by the due date stated on the invoice:

3.6.1 - The Company reserves the right to charge interest to the Customer at the rate of 7% above LIBOR on the unpaid balance (such interest to accrue on a day to day basis from the due date for payment until receipt by the Company of the full amount whether before or after any judgement) and

3.6.2 - The Customer shall indemnify the Company against all costs and expenses (including any legal costs and expenses on a full indemnity basis) incurred or sustained by the Company in recovering sums due or in exercising its rights pursuant to Clause 6, in each case without prejudice to any other rights or remedies available to the Company.

3.7 - Payment shall be due whether or not property in the Equipment has passed by virtue of Clause 6 below and the Company shall (without prejudice to any other right or remedy) accordingly be entitled to sue for the price once the same is due even if property in the Equipment has not passed.

4 LICENSES, TAXES AND OTHER CHARGES

4.1 - Unless otherwise agreed in writing with the Company the Customer warrants and represents to the Company that every applicable license (import or otherwise), foreign exchange control authorisation or any other authority that may be required in connection with the Equipment, has been or will be duly obtained by and at the expense of the Customer.

4.2 - Unless otherwise agreed in writing the prices do not include Value Added Tax (.VAT.) or any other tax or levy on the supply or importation of the Equipment.

5 DELIVERY AND COMPLETION OF SERVICES

5.1 - Delivery shall be ex-works Newport UK unless specified otherwise on the order acknowledgement issued by the Company to the Customer for the Equipment.

5.2 - Upon delivery the Customer shall sign the delivery note of the Company or its carrier to acknowledge receipt of the Equipment.

5.3 - Any dates for delivery are approximate only. The Company's liability for any loss, damage, cost or expense caused by any delay or failure in delivery of the Equipment howsoever caused, including without limitation the Company's negligence, shall be limited to the price of that Equipment under the Contract. The Equipment may be delivered by the Company in advance of the quoted delivery date if agreed with the Customer.

5.4 - Where the Equipment is ordered to be delivered in installments (.call-off order.), each delivery shall be paid for separately and failure by the Company to deliver any one or more of the installments in accordance with these Conditions shall not entitle the Customer to treat the Contract for the whole of the Equipment as repudiated.

5.5 - If the Customer fails or refuses to take delivery of the Equipment or fails to give the Company adequate delivery instructions by the time stated for delivery then, without prejudice to any other right or remedy available to the Company, the Company may:

5.5.1 - store the Equipment until actual delivery and charge the Customer the reasonable costs (including insurance) of storage and subsequent re-delivery; or

5.5.2 - treat the Contract as repudiated and use the Equipment in fulfilment of other Customers' orders.

5.6 - Where the Equipment is to be collected by the Customer, the Company may treat the Contract as repudiated and re-sell the Equipment if the Customer fails to collect the Equipment within 7 days of notification by the Company that it is ready for despatch.

5.7 - The Company may charge the Customer for packaging, insurance, carriage and freight of the Equipment. The Company may pack the Equipment in whatever manner it considers reasonable. The Company shall be under no obligation to conform to any limits for weights or measurements of any consignment of Equipment.

6 TITLE AND RISK

6.1 - Risk of loss or damage to the Equipment shall pass to the Customer when the Equipment is delivered to the Customer. If the Equipment is carried at the cost of the Company, the Company will only bear the risk of loss or damage in transit if it receives written notification of such loss or damage within 3 days of delivery, or in the case of non-delivery, within 21 days of the date of despatch.

6.2 - Notwithstanding the passing of risk, the Company retains the legal and equitable title in the Equipment, which shall not pass to the Customer until the Company has received payment of all sums due to the Company from the Customer under the Contract. Title to software supplied always remains with the Company.

6.3 - Until title in the Equipment has passed to the Customer the Customer shall hold the Equipment in a fiduciary capacity for the Company. In particular the Customer shall:

6.3.1 - insure the Equipment against loss or damage with an insurance office of good reputation.

6.3.2 - store the Equipment safely and securely and separately or in some other way ensure that it is readily identifiable as the property of the Company;

6.3.3 - return the Equipment to the Company forthwith on demand.

6.4 - For so long as the Customer continues to trade and is not insolvent or otherwise within the conditions of Clause 11, the Customer shall have a license to offer for sale and sell the Equipment in the ordinary course of business as principal for its own account and not as agent for the Company. The Company may terminate this license at any time by notice in writing to the Customer. The license will terminate automatically if the Customer falls within Clause 11.

6.5 - The Company or any of its servants, agents or authorised representatives shall be entitled at any time and without prior notice to enter on any premises where any Equipment is stored, or is believed by the Company to be stored, to retake possession of any Equipment and to sell or otherwise deal with or dispose of it.

6.6 - The provisions of this Clause 6 shall survive the termination of the Contract for whatever reason.

7 WARRANTIES

7.1 - Subject to the conditions set out below the Company warrants that the Equipment will be free from defects in materials and workmanship for the relevant warranty period. Unless stated otherwise the warranty period begins on delivery to the Customer.

7.2 - The warranty period for the Equipment is one year unless otherwise stated by the Company in writing at the time of supply. Any extended warranties shall be subject to the terms and conditions set out separately and pertaining to such specific equipment and warranty period only. All extended warranties apply to the first customer purchase from the Company and are not transferable.

7.3 - If any of the Equipment does not conform to this warranty, the Company will at its option repair or replace the Equipment.

7.4 - The warranty above is conditional upon:

7.4.1 - the Customer giving written notice to the Company of the alleged defect in the Equipment, setting out full particulars of the defect, within 14 days of the date on which the defect becomes apparent to the Customer;

7.4.2 - the Company and the Company's insurers being given a reasonable opportunity to investigate the defects including if requested by the Company an opportunity to inspect the Equipment at the Customer's premises; and

7.4.3 - if so requested by the Company, the Customer returning the Equipment to the Company carriage paid.

7.5 - The Company shall be under no liability under the above warranty:

7.5.1 - in respect of any defect in the Equipment arising from any drawing, design or specification supplied by the Customer;

7.5.2 - in respect of any defect arising from fair wear and tear, wilful damage, negligence of the Customer, abnormal working conditions, failure to properly maintain and operate the Equipment in accordance with its specifications, failure to follow the Company's instructions or industry standards and practices, misuse or alteration or repair of the Equipment without the Company's approval or improper storage;

7.5.3 - where the Equipment is transported to the Customer at the Customer's risk and the defect occurred during transit;

7.5.4 - in respect of parts, materials or Equipment not manufactured by the Company in which case the Customer shall only be entitled to the benefit of any warranty or guarantee as it is given by the manufacturer to the Company.

7.6 - The Company shall have no liability under this warranty other than under Clause 7.3. If the Company fails to comply with its obligations under Clause 7.3 its liability for such failure shall be limited to the price of the Equipment.

7.7 - Subject to Clause 8, this express warranty is the Customer's sole remedy in respect of defects in the Equipment and is in lieu of all warranties, conditions or other terms implied by statute or common law, custom, trade, usage, course of dealing or otherwise, all of which are excluded to the fullest extent permitted by law.

7.8 - Nothing in these Conditions shall affect the statutory rights of a Customer who is dealing with the Company as a consumer.

8 LIABILITY

8.1 - Except in respect of:

8.1.1 - injury to or death of any person caused by the Company's negligence

8.1.2 - the Company's liability under the Consumer Protection Act 1987 for any injury to or death of any person or loss of or damage to property intended for private use caused by a defect in the Equipment;

8.1.3 - breach on the part of the Company of any undertaking as to title implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982; or

8.1.4 - insofar as any exclusion or limitation of the Company's liability under the Contract is otherwise prohibited, void or unenforceable by law. The Company shall not be liable for any loss or damage which arises out of or in connection with the supply of the Equipment or its use or resale by the Customer except as expressly provided in these Conditions. The Company shall not be liable for interference with or from other radio equipment or services due to the installation or use of the Equipment. If requested to investigate such interference the Company will charge for the service at its current rates.

8.1.5 - the Company shall not be liable for any consequential or indirect loss suffered by the Customer whether this arises from a breach of duty, in contract or in tort, including negligence, or in any other way including without limitation loss of business, goodwill or profit.

8.2 - In the event that notwithstanding the provision of Clauses 7.6, 7.7, and

8.1, the Company is found liable for any loss or damage suffered by the Customer, that liability shall in no event exceed the amount of insurance cover the Company has in respect of the particular liability.

9 INTELLECTUAL PROPERTY/SOFTWARE

9.1 - No intellectual property rights in or associated with the Equipment shall pass to the Customer as a result of the sale of the Equipment to the Customer.

9.2 - The Company endeavours not to offer for sale Equipment which infringes known and valid patents or other intellectual property rights but shall not be liable in any manner whatsoever to the Customer for any costs, damages or loss of profits arising from the use or sale of the Equipment which infringes or allegedly infringes any patent, registered design, copyright or other intellectual property rights of any third party.

Conditions Of Sale

9.3 - Software embedded in the Equipment and stored in programmable read only memory is supplied by way of irrevocable non-exclusive license to the Customer to use such software in or in respect of the Equipment. The Customer shall not other than as expressly permitted

by these Conditions, copy, reproduce, translate, adapt, de-compile, modify, reverse engineer or disassemble any such software. The Customer acknowledges that the copyright and other intellectual property rights in such software are the property of and shall remain with the Company.

9.4 - Software supplied by the Company which is not embedded in the Equipment is licensed on the basis of a Software License Agreement normally provided with each copy of that software or its handbook and the Customer agrees to use such software strictly in accordance with the terms of its license.

9.5 - The Company also reserves the copyright and all other intellectual property rights in all its prototypes, software, drawings, sketches, plans, prints and other documentation or data. No reproduction thereof shall be made without permission of the Company and the Customer shall not transfer or part with possession, to a third party, of any of the above without the written permission of the Company.

10 EXPORT CONDITIONS

10.1 - In these Conditions Incoterms. means the international rules for the interpretation of trade Conditions of the International Chamber of Commerce as in force at the date when the contract between the Company and the Customer was made. These Conditions shall prevail over Incoterms in the event of inconsistency between them.

10.2 - Where the Equipment is supplied for export from the United Kingdom, the provision of this Clause 10 shall apply notwithstanding any other provisions of these Conditions, subject to any special Conditions agreed in writing between the Company and the Customer.

10.3 - The Customer shall pay any bank or other charges on negotiable instruments in respect of export payments.

10.4 - Unless otherwise specified on the order acknowledgement issued by the Company to the Customer for the Equipment, Incoterms ex works shall apply.

10.5 - Where delivery is made f.o.b. the Company shall be under no obligation to give notice under Section 32(3) of the Sale of Goods Act 1979.

10.6 - Where testing and inspection of the Equipment is required before shipment the Customer shall be responsible for arranging this at the Company's premises. The Company shall have no liability for any defect in the Equipment in respect of any damage during transit.

10.7 - Unless otherwise agreed in writing between the Company and the Customer, payment shall be made by irrevocable letter of credit opened by the Customer in favour of the Company and confirmed by a bank in the UK approved by the Company

11 INSOLVENCY OF CUSTOMER

11.1 - If the Customer is unable to pay its debts, ceases to carry on business or becomes bankrupt or insolvent or any steps are taken by any person with a view to its winding up or dissolution or it enters into any composition or arrangement for the benefit of its creditors, or any trustee, liquidator, receiver or similar officer is appointed to it over its assets, the Company shall be entitled to cancel the Contract or suspend any further deliveries under the Contract without any liability to the Company and if the Equipment has been delivered but not paid for the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

12 SPECIFICATIONS

12.1 - The Company may alter specifications, dimensions and other product details as stated by the Company at any time without notice.

12.2 - If the Equipment is to be manufactured or any process is to be applied to the Equipment by the Company in accordance with a specification submitted by the Customer, the Customer shall indemnify the Company against all loss, damages, Costs and expenses awarded, against or incurred by the Company in connection with or paid or agreed to be paid by the Company in settlement of any claim or infringement of any patent, copyright, design, trade mark or other intellectual property right of any other person which results from the Company's use of the Customer's specification.

13 MISCELLANEOUS

13.1 - The laws of England shall govern any controversy or claim of whatever nature arising out of or relating to these conditions or breach thereof.

13.2 - All disputes arising in connection with these Conditions or the Contract shall be subject to the non-exclusive jurisdiction of the English Courts.

13.3 - The Company is a member of the group of companies whose holding company is Bewator AB and accordingly the Company may perform any of its obligations or exercise any of its rights under these Conditions by itself or through any other member of its group, provided that any act or omission of any such other member shall be deemed to be the act or omission of the Company.

13.4 - The Company shall not be liable in any circumstances for any failure to perform any obligations where such failure is due to industrial dispute; acts or delays of suppliers; fire; flood; act of god; armed conflict; any rule or action of any public authority; transportation delays; refusal or delay in granting any license or permit or any cause beyond the Company's reasonable control.

13.5 - Any notice required or permitted to be given by either party to the other under these conditions shall be in writing addressed to the other party at the address shown on the acceptance of order or quotation of the Company or such other address as may have been notified pursuant to this Clause to the party giving the notice.

13.6 - The failure of either party to exercise or enforce any rights under this Agreement shall not amount to a waiver of those rights.

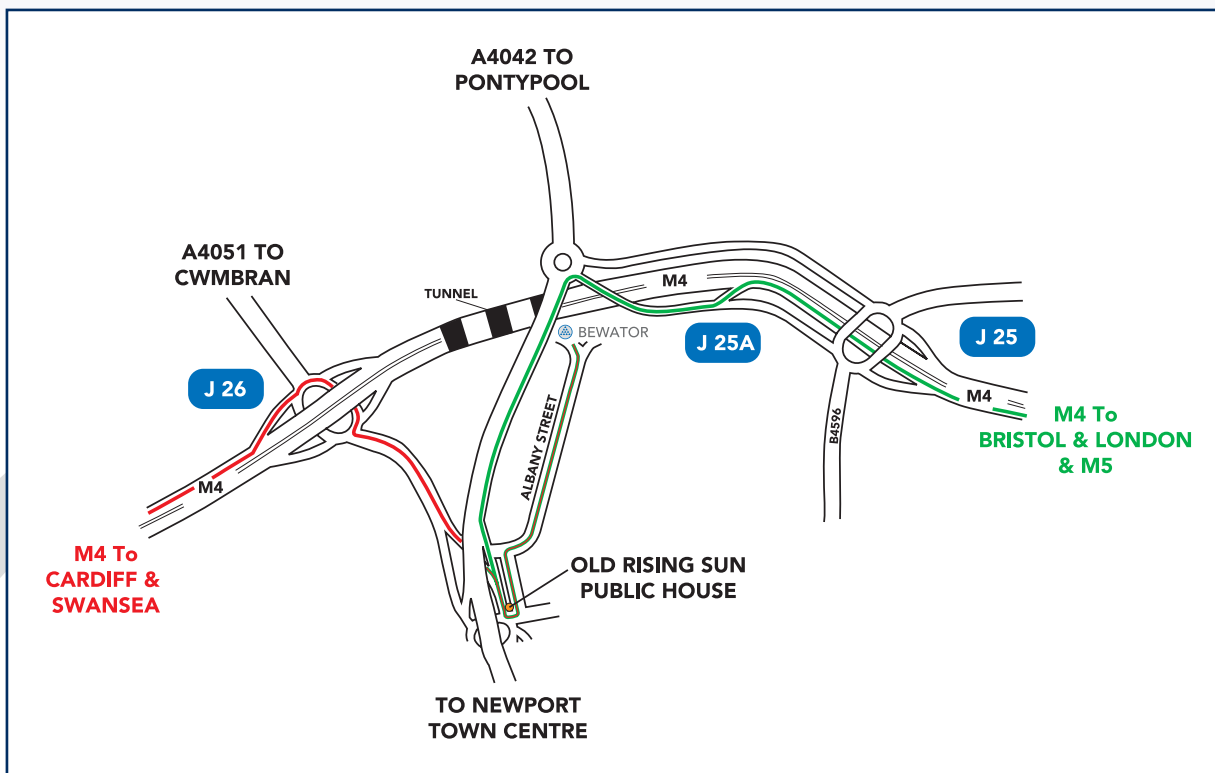
13.7 - The illegality or invalidity of any part of these Conditions shall not effect the legality or validity of the remainder of them.

How To Find / Contact Us...

Head Office
Bewator Ltd
Albany Street
Newport, South Wales
NP20 5XW

Directions By Road:

From the East. Join the M4 Westwards. Exit at Junction 25A. Feed into the left hand lane, and turn left when you reach the roundabout. Take the next slip road, down to a roundabout, with the Rising Sun Pub on your left. Take the first exit. At the next T-Junction, turn right. Follow the road almost to the end, where you will see our head quarters on the left :



Contact Details

Telephone:
Main Switchboard: 01633 821000
UK Access Control: 01633 820610

Fax: 01633 850893

E-mail: sales@bewator.co.uk

Website: www.bewator.co.uk

How To Find / Contact Us...



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